NOTICES OF PROPOSED RULEMAKING

Unless exempted by A.R.S. § 41-1005, each agency shall begin the rulemaking process by first submitting to the Secretary of State's Office a Notice of Rulemaking Docket Opening followed by a Notice of Proposed Rulemaking that contains the preamble and the full text of the rules. The Secretary of State's Office publishes each Notice in the next available issue of the *Register* according to the schedule of deadlines for *Register* publication. Under the Administrative Procedure Act (A.R.S. § 41-1001 et seq.), an agency must allow at least 30 days to elapse after the publication of the Notice of Proposed Rulemaking in the *Register* before beginning any proceedings for making, amending, or repealing any rule. (A.R.S. §§ 41-1013 and 41-1022)

NOTICE OF PROPOSED RULEMAKING

TITLE 9. HEALTH SERVICES

CHAPTER 14. DEPARTMENT OF HEALTH SERVICES LABORATORIES

[R06-324]

PREAMBLE

1. Sections Affected — **Rulemaking Action**

R9-14-601	Amend
R9-14-602	Amend
R9-14-603	Amend
R9-14-604	Repeal
R9-14-604	New Section
R9-14-605	Amend
R9-14-606	Amend
R9-14-607	Amend
R9-14-608	Amend
R9-14-609	Amend
R9-14-610	Amend
R9-14-611	Amend
R9-14-612	Amend
R9-14-613	Amend
R9-14-614	Amend
R9-14-615	Amend
R9-14-616	Amend
R9-14-617	Amend
R9-14-618	Amend
R9-14-619	Amend
R9-14-620	Renumber
R9-14-620	New Section
R9-14-621	Renumber
R9-14-621	Amend
Table 1	Amend
Exhibit I	New Exhibit
Exhibit II	New Exhibit

2. The statutory authority for the rulemaking, including both the authorizing statute (general) and the statutes the rules are implementing (specific):

Authorizing statutes: A.R.S. §§ 36-136(F) and 36-495.13

Implementing statutes: A.R.S. §§ 36-495.01 through 36-495.03, 36-495.05 through 36-495.09, 36-495.14, 36-495.15, 41-1001, 41-1055, and 41-1073 through 41-1076

3. A list of all previous notices appearing in the *Register* addressing the proposed rule:

Notice of Rulemaking Docket Opening: 12 A.A.R. 228, January 27, 2006

4. The name and address of agency personnel with whom persons may communicate regarding the rulemaking:

Name: Steve Baker, Office Chief

Address: Arizona Department of Health Services
Office of Laboratory Services
250 N. 17th Ave.
Phoenix, AZ 85007

Telephone: (602) 364-0735

Fax: (602) 364-0759

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or

Name: Kathleen Phillips, Rules Administrator

Address: Arizona Department of Health Services
Office of Administrative Rules
1740 W. Adams St., Suite 202
Phoenix, AZ 85007

Telephone: (602) 542-1264

Fax: (602) 364-1150

E-mail: phillik@azdhs.gov

5. An explanation of the rule, including the agency's reasons for initiating the rule:

a. Purpose of this rulemaking

The rules in 9 A.A.C. 14, Article 6 implement the statutes in A.R.S. Title 36, Chapter 4.3 by establishing application and fee requirements and the process for licensing environmental laboratories; minimum standards of proficiency, methodology, quality assurance, operation, and safety for environmental laboratories; minimum standards for laboratory records and reports; specific requirements for mobile laboratories and out-of-state laboratories; and time-frames.

This rulemaking updates the rules for environmental laboratory licensure to bring them into compliance with federal regulations and current standards of practice. The rulemaking also reorganizes the fee structure; revises the fee assessment process; increases fees; clarifies the rules; and addresses the issues identified in the five-year-review report on the rules, which was approved by the Governor's Regulatory Review Council in May 2006.

The rulemaking increases the fees for environmental laboratory licensing so that the fees will again be sufficient to sustain the Environmental Laboratory Licensing Program. The Environmental Laboratory Licensing Program is supported entirely by the environmental laboratory licensure revolving fund created under A.R.S. § 36-495.15.

It is essential that ADHS increase the fees because the Program has been operating at a deficit since FY2005. The deficit for FY2006 was $148,718, and the projected deficit for FY2007 in the absence of a fee increase would be approximately $156,140. The Program has been able to sustain itself thus far by using the surplus in the environmental laboratory licensure revolving fund. However, the fund currently contains only $320,659, enough to sustain the Program for approximately two more years at the current deficit level.

b. Need for immediate effective date

ADHS intends to request an immediate effective date for this rulemaking, as authorized under A.R.S. § 41-1032(A)(1) and (2), because the rule revisions are necessary to preserve the public health and safety and to avoid a violation of federal law or regulation. The need for an immediate effective date is not created due to ADHS's delay or inaction.

The overriding mission and goal of ADHS in its Environmental Laboratory Licensing Program is to assure the public's access to clean and safe drinking water, an environment safe from contaminants in air and soil, and proper treatment of wastewater. Licensing and regulating the laboratories that provide compliance testing is essential to protecting the public health and safety because the information provided to the public about the safety of its drinking water, air, soil, and treated wastewater is based upon the test results produced in those laboratories. Because ADHS is required to sustain the Environmental Laboratory Licensing Program through the fees charged, and the current Program expenses exceed current fee revenues, it is essential that fee revenues be increased as soon as possible so that ADHS can continue to provide this essential ser-

vice to the public.

In addition, many of the changes in this rulemaking are being made as a result of input from the U.S. Environmental Protection Agency (EPA) and the Arizona Department of Environmental Quality (ADEQ) and are essential to allow the state of Arizona to maintain primacy for safe drinking water in Arizona. The Safe Drinking Water Act gives EPA the responsibility for establishing national drinking water standards to protect the health of individuals who obtain their drinking water through public water systems. 40 CFR Part 142 allows a state to obtain primary authority to regulate (primacy) in the area of safe drinking water if the state establishes drinking water regulations that are no less stringent than the national primary drinking water regulations in effect under 40 CFR Part 141. One of the requirements for primacy is that the state establish and maintain a state program for the certification of laboratories conducting analytical measurements of drinking water contaminants pursuant to the requirements of the state's primary drinking water regulations. Because ADHS has statutory authority to license environmental laboratories that perform compliance testing, and ADEQ has statutory authority for the other components of Arizona's primary drinking water regulations, ADEQ and ADHS essentially share primacy for safe drinking water in Arizona. Provisions in the ADHS rules that are currently less stringent than the national primary drinking water regulations are impeding Arizona's ability to maintain this primacy. ADHS has had numerous communications with both EPA and ADEQ regarding this issue, and the shortcomings were described in the five-year-review report for these rules that was approved by G.R.R.C. in May 2006. It is essential that these provisions be revised as soon as possible so that Arizona (through ADEQ and ADHS) can maintain primacy for safe drinking water in Arizona.

c. Process for this rulemaking

ADHS formed an Environmental Laboratories Rulemaking Work Group (Work Group) to review and provide ADHS with input on the draft revisions for this rulemaking. The Work Group met on May 10, July 12, and July 25 and considered three different versions of the draft rules. Through those meetings, ADHS and the Work Group were able to reach consensus on the contents of the draft rules.

On July 27, ADHS presented Revision 2 of the draft rules for consideration at the Environmental Laboratory Advisory Committee (ELAC) meeting, along with a list of changes that had been identified for Revision 3 of the draft rules. After recommending several additional changes, ELAC unanimously recommended that ADHS go forward with Revision 2, as revised by the list of changes identified for Revision 3 and the additional changes identified during the ELAC meeting. ADHS created this Notice of Proposed Rulemaking using Revision 3, with only four additional minor changes--three made to clarify language and one to put definitions in alphabetical order.

6. A reference to any study relevant to the rule that the agency reviewed and either proposes to rely on or not rely on in its evaluation of or justification for the rule, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:

None

7. A showing of good cause why the rule is necessary to promote a statewide interest if the rule will diminish a previous grant of authority of a political subdivision of this state:

Not applicable

8. The preliminary summary of the economic, small business, and consumer impact:

As used in this summary, "minimal" means less than $1,000; "moderate" means $1,000 to $9,999; "substantial" means $10,000 or more; and "significant" means meaningful or important, but not readily subject to quantification. This summary describes only the most noteworthy economic impacts expected to result from this rulemaking.

ADHS believes that the costs of this rulemaking will be borne by ADHS, environmental laboratory licensees (licensees), and applicants for environmental laboratory licensure (applicants). ADHS believes that the benefits from this rulemaking will be enjoyed by ADHS, the Arizona Department of Environmental Quality (ADEQ), licensees, applicants, laboratory clients (clients), and the public.

In R9-14-602, ADHS exempts from licensing each out-of-state laboratory at which only microbiology testing of bottled water is performed and for which the owner holds a current and valid environmental laboratory license or certificate, issued by another state of the United States, that specifically authorizes drinking water testing. This will result in a moderate-to-substantial benefit to each licensee whose laboratory qualifies for the exemption because licensure will no longer be required. ADHS believes that this exemption will not be detrimental to public health because the U.S. Food and Drug Administration regulates the safety of bottled drinking water as a food product and because requiring a licensee to have a current and valid environmental laboratory license issued by another state helps to ensure that the microbiology testing done by the licensee to monitor compliance with the federal standards is appropriate and scientifically valid.

In R9-14-603, ADHS eliminates the installment payment option for a small business applicant for an initial license. This may result in a significant cost to a small business applicant that desired to use the installment payment option, because it will no longer be possible to spread fee payment over the entire year for an initial license. However, the impact should be mitigated somewhat because the option will still be available upon renewal. This will result in a significant benefit to ADHS because ADHS has experienced problems with receiving timely installment payments and believes that compliance will improve if installment payment is only available upon renewal.

ADHS is also revising R9-14-603 to require an applicant to pay all of the fees required under R9-14-607 and R9-14-608 along with an application. Although this will not actually result in an increased cost to an applicant, it is a significant change in that there will no longer be the delay in payment of these fees resulting from the ADHS billing process. Thus, each applicant will need to make any business adjustments necessary to ensure that the funds are available at the time of application rather than more than a month thereafter. This will result in a significant benefit to ADHS because ADHS will no longer need to administer a billing process as a step in licensing, with the costs related to that process, and will be better positioned to implement on-line application for a license, per the state's e-licensing initiative headed by the Government Information Technology Agency, when the time comes.

In R9-14-605, ADHS eliminates the requirement for ADHS to inspect a laboratory as part of the substantive review period for an initial license, instead making it discretionary, and prescribes factors for ADHS to consider in determining whether to conduct an annual laboratory inspection. This will result in a significant benefit to ADHS because it makes the rule consistent with A.R.S. § 36-495.07(A) and allows ADHS not to conduct an initial licensing inspection if ADHS determines that an initial licensing inspection is unnecessary for a laboratory. This will also result in a substantial benefit to ADHS because ADHS will not need to hire the additional 1.6 FTE auditors necessary to complete annual laboratory inspections on a 12-month cycle. ADHS is currently completing these inspections on approximately an 18-month cycle. The cost savings is approximately $104,000 per year. In addition, ADHS will receive a moderate benefit from the reduced staff time spent arranging out-of-state travel and processing out-of-state travel expense billing for annual inspections and a potentially moderate benefit from the reduction in in-state travel costs (which are not reimbursed by licensees). This will also result in a minimal-to-moderate benefit to each laboratory at which an annual inspection is not conducted, because of the personnel time savings from not participating in the annual inspection and, for out-of-state laboratories, the cost savings from not being required to reimburse ADHS for the actual expenses incurred by ADHS as a result of the laboratory's location.

It should be noted that, to comply with EPA requirements, the rule requires ADHS to conduct a laboratory inspection at least every three years for each laboratory at which drinking water compliance testing is performed.

In this rulemaking, ADHS moves all of the method and instrumentation fees from R9-14-607 and compiles them in Exhibit I, which also contains the complete listing of approved methods. ADHS also revises the fee structure by eliminating all of the combined method fees and increases the adjusted fees by 29% overall. Eliminating the combined method fees will result in a minimal cost to each licensee. To minimize the impact of eliminating the combined fees, ADHS revised the individual method fees so that the overall increase resulting solely from eliminating the combined fees was only approximately $5,742 (or approximately 1%). Eliminating the combined fees will result in a significant benefit to ADHS, licensees, and applicants because it makes the fee structure more equitable across the board and makes the actual fees owed very clear. ADHS will also receive a moderate benefit from the approximately $5,742 increase in annual fees. As a result of increasing fees by 29%, ADHS will receive approximately $55,860 in increased application fees and approximately $102,595 in increased method and instrumentation fees each year (including the $5,742). In addition to benefiting ADHS, the increased fees will result in a significant benefit to licensees, clients, ADEQ, and the public because they will allow ADHS to sustain and thus continue operating the Environmental Laboratory Licensing Program.

The increase in application fees will result in a minimal cost per laboratory to each applicant, with the lowest increase at $377 and the highest increase at $528 for a single license for a single laboratory and the lowest increase at $324 and the highest increase at $479 for a single license for multiple laboratories not located on contiguous grounds. The overall increase for an applicant that applies for a single license for multiple laboratories may be moderate if the applicant is applying for more than two laboratories. Based on current licensing, only one out of the 136 licensees that will still be required to be licensed after the rules take effect will incur a moderate increase in application fees, at $1,297.

The increase in method and instrumentation fees will result in a minimal-to-moderate cost for 130 out of the current 141 licensees (11 will see reductions in method and instrumentation fees). Most of those 130 licensees (97 out of 130) will incur only a minimal cost ($22 to $987), while the remaining 33 will incur a moderate cost ($1,047 to $5,751). This will result in a substantial benefit to ADHS because of the additional approximately $102,595 in method and instrumentation fee revenue each year.

Throughout the rules, ADHS is making a number of changes to bring the rules into compliance with EPA regulations, most notably those created under the Safe Drinking Water Act. These changes will result in a significant benefit to ADHS and ADEQ because bringing the rules into compliance with EPA regulations will remove an existing barrier to ADHS's and ADEQ's maintaining primacy for safe drinking water in Arizona. These changes will also result in a significant benefit to licensees and applicants because the rules' being consistent with EPA regulations will make it easier for licensees and applicants to comply with EPA regulations.

ADHS believes that 16 of the current private laboratory licensees may meet the definition of "small business" in A.R.S. § 41-1001. ADHS does not believe that any other small businesses are subject to the rules. Because these rules provide minimum standards to protect the public health, ADHS does not believe that it would be appropriate to provide exceptions to those standards based upon status as a small business. ADHS has, however, maintained the provision allowing a small business licensee to pay some of the fees associated with renewal licensing on an installment plan.

ADHS does not believe that there is a less intrusive or less costly alternative method of achieving the purpose of the rulemaking.

9. The name and address of agency personnel with whom persons may communicate regarding the accuracy of the economic, small business, and consumer impact statement:

Name: Steve Baker, Office Chief

Address: Arizona Department of Health Services
Office of Laboratory Services
250 N. 17th Ave.
Phoenix, AZ 85007

Telephone: (602) 364-0735

Fax: (602) 364-0759

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or

Name: Kathleen Phillips, Rules Administrator

Address: Arizona Department of Health Services
Office of Administrative Rules
1740 W. Adams St., Suite 202
Phoenix, AZ 85007

Telephone: (602) 542-1264

Fax: (602) 364-1150

E-mail: phillik@azdhs.gov

10. The time, place, and nature of the proceedings for the making, amendment, or repeal of the rule, or if no proceeding is scheduled, where, when, and how persons may request an oral proceeding on the proposed rule:

ADHS has scheduled the following oral proceedings:

Date	October 17, 2006	October 19, 2006	October 20, 2006
Time	Noon	Noon	Noon
Location	ADHS Training Room 1500 E. Cedar Ave., #22 Flagstaff, AZ 86004	State Laboratory Dome 250 N. 17th Ave. Phoenix, AZ 85007	State Building, Room 5 400 W. Congress Tucson, AZ 85701
Nature	Oral Proceeding	Oral Proceeding	Oral Proceeding

Individuals with a disability may request a reasonable accommodation by contacting Sarah Harpring at harpris@azdhs.gov or (602) 542-1513. A request should be made as early as possible to allow sufficient time to arrange for the accommodation.

Written comments on the proposed rulemaking or the preliminary economic, small business, and consumer impact summary may be submitted to either individual listed in items #4 and #9 until the close of record at 5:00 p.m. on October 20, 2006.

11. Any other matters prescribed by statute that are applicable to the specific agency or to any specific rule or class of rules:

Not applicable

12. Incorporations by reference and their location in the rules:

R9-14-610(B):

Key	Reference
A4	Office of Water, EPA, Pub. No. EPA-821-R-02-019, Method 1631, Revision E: Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Atomic Fluorescence Spectrometry (August 2002).
A5	Technicon Industrial Systems, Industrial Method No. 129-71W, Fluoride in Water and Wastewater (December 1972).
A6	Herbert P. Wagner et al., EPA, Pub. No. EPA 815-B-01-001, Method 317.0: Determination of Inorganic Oxyhalide Disinfection By-Products in Drinking Water Using Ion Chromatography with the Addition of a Postcolumn Reagent for Trace Bromate Analysis (rev. 2.0 July 2001).
A7	Herbert P. Wagner et al., EPA, Pub. No. EPA 815-R-05-007, Method 326.0: Determination of Inorganic Oxyhalide Disinfection By-Products in Drinking Water Using Ion Chromatography Incorporating the Addition of a Suppressor Acidified Postcolumn Reagent for Trace Bromate Analysis (rev. 1.0 June 2002).
A8	Teri A. Dattilio et al., EPA, Pub. No. EPA 815-R-05-008, Method 327.0: Determination of Chlorine Dioxide and Chlorite Ion in Drinking Water Using Lissamine Green B and Horseradish Peroxidase with Detection by Visible Spectrophotometry (rev. 1.1 May 2005).
A9	B.B. Potter and J.C. Wimsatt, EPA, Pub. No. EPA/600/R-05/055, Method 415.3: Determination of Total Organic Carbon and Specific UV Absorbance at 254 nm in Source and Drinking Water (rev. 1.1 February 2005).
C2	American Public Health Association et al., Standard Methods for the Examination of Water and Wastewater (20th ed. 1998).
D4	Office of Ground Water and Drinking Water Technical Support Center, EPA, Pub. No. EPA 815-R-05-004, Manual for the Certification of Laboratories Analyzing Drinking Water: Criteria and Procedures Quality Assurance (5th ed. January 2005).
D7	M.V. Bassett et al., EPA, Pub. No. EPA 815-B-01-002, Method 531.2: Measurement of N-Methylcarbamoyloximes and N-Methylcarbamates in Water by Direct Aqueous Injection HPLC with Postcolumn Derivatization (rev. 1.0 September 2001).
D8	S.C. Wendelken et al., EPA, Method 515.4: Determination of Chlorinated Acids in Drinking Water by Liquid-Liquid Microextraction, Derivatization, and Fast Gas Chromatography with Electron Capture Detection (rev. 1.0 April 2000).
D9	Ed K. Price et al., EPA, Pub. No. 815-R-05-005, Method 527: Determination of Selected Pesticides and Flame Retardants in Drinking Water by Solid Phase Extraction and Capillary Column Gas Chromatography/Mass Spectrometry (GC/MS) (rev. 1.0 April 2005).
D10	J.W. Munch, EPA, Pub. No. 600/R-05/052, Method 529: Determination of Explosives and Related Compounds in Drinking Water by Solid Phase Extraction and Capillary Column Gas Chromatography/Mass Spectrometry (GC/MS) (rev. 1.0 September 2002).
D11	J.A. Shoemaker and M.V. Bassett, EPA, Pub. No. EPA/600/R-05/053, Method 535: Measurement of Chloroacetanilide and Other Acetamide Herbicide Degradates in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS) (version 1.1 April 2005).
D12	J.W. Munch and M.V. Bassett, EPA, Pub. No. EPA/600/R-05/054, Method 521: Determination of Nitrosamines in Drinking Water by Solid Phase Extraction and Capillary Column Gas Chromatography with Large Volume Injection and Chemical Ionization Tandem Mass Spectrometry (MS/MS) (version 1.0 September 2004).
D13	M.M. Domino et al., EPA, Pub. No. EPA 815-B-03-002, Method 552.3: Determination of Haloacetic Acids and Dalapon in Drinking Water by Liquid-Liquid Extraction, Derivatization, and Gas Chromatography with Electron Capture Detection (rev. 1.0 July 2003).
E	40 CFR Part 136 app. A (July 2006).
F	Office of Solid Waste and Emergency Response, EPA, Pub. No. SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (3rd ed. 1986), as amended by Update I, July 1992; Update IIA, August 1993; Update II, September 1994; Update IIB, January 1995; Update III, December 1996; Update IIIA, June 1999; and Update IIIB, July 2005.
F2	EPA, Method 5035A: Closed-System Purge-and-Trap and Extraction for Volatile Organics in Soil and Waste Samples (draft rev. 1 July 2002).
F3	EPA, Method 4025: Screening for Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans (PCDD/Fs) by Immunoassay (rev. 0 October 2002).
F4	EPA, Method 3570: Microscale Solvent Extraction (MSE) (rev. 0 November 2002).
F5	EPA, Method 3511: Organic Compounds in Water by Microextraction (rev. 0 November 2002).
F6	EPA,. Method 5030C: Purge-and-Trap for Aqueous Samples (rev. 3 May 2003).

F7 EPA, Method 8015D: Nonhalogenated Organics Using GC/FID (rev. 4 June 2003).
F8 EPA, Method 5021A: Volatile Organic Compounds in Various Sample Matrices Using Equilibrium Headspace Analysis (rev. 1 June 2003).
F9 EPA, Method 9015: Metal Cyanide Complexes by Anion Exchange Chromatography and UV Detection (rev. 0 November 2004).
F10 EPA, Method 9013A: Cyanide Extraction Procedure for Solids and Oils (rev. 1 November 2004).
F11 EPA, Method 7000B: Flame Atomic Absorption Spectrophotometry (rev. 2 January 1998).
F12 EPA, Method 7010: Graphite Furnace Atomic Absorption Spectrophotometry (rev. 0 January 1998).
O 40 CFR Part 50 (July 2006).
P EPA, Pub. No. EPA/600/4-84/013, USEPA Manual of Methods for Virology (rev. June 2001).
P4 EPA, Pub. No. EPA 815-R-05-001, Method 1622: *Cryptosporidium* in Water by Filtration/IMS/FA (December 2005).
P5 EPA, Pub. No. EPA 815-R-05-002, Method 1623: *Cryptosporidium* and *Giardia* in Water by Filtration/IMS/FA (December 2005).
Q 40 CFR Part 60 app. A (July 2006).
S 40 CFR Part 61 apps. B and C (July 2006).
S1 EPA, Pub. No. EPA/625/R-96/010b, Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air (2nd ed. January 1999).
U Environmental Measurements Laboratory, U.S. Department of Energy, Pub. No. HASL-300, EML Procedures Manual, Vol. I (28th ed. February 1997).
Z EPA, Pub. No. EPA 815-R-00-014, Volume 1, Methods for the Determination of Organic and Inorganic Compounds in Drinking Water (August 2000).
Z1 EPA, Pub. No. EPA 821/R/01/034, EPA Method 1605: *Aeromonas* in Finished Water by Membrane Filtration Using Ampicillin-Dextrin Agar with Vancomycin (ADA-V) (October 2001).
Z2 EPA, Pub. No. EPA 821/R-93-010-A, Methods for the Determination of Nonconventional Pesticides in Municipal and Industrial Wastewater, Volume I (rev. 1 August 1993).
Z3 EPA, Pub. No. EPA-821-R-02-013, Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (4th ed. October 2002).
Z4 IDEXX Laboratories, Inc., IDEXX SimPlate TM HPC Method for Heterotrophs in Water (November 2000).
Z5 William A. Yanko, EPA, Pub. No. EPA/600/1-87/014, Occurrence of Pathogens in Distribution and Marketing Municipal Sludges (1987).
Z6 ASTM, Standard Test Methods for Determining Sediment Concentration in Water Samples (reapproved 2002).
Z7 CEM Corporation, Closed Vessel Microwave Digestion of Wastewater Samples for Determination of Metals (April 1992).
Z8 EPA, Pub. No. EPA-821-R-02-024, Method 1604: Total Coliforms and *Escherichia coli* in Water by Membrane Filtration Using a Simultaneous Detection Technique (MI Medium) (September 2002).
Z9 Lachat Instruments, QuikChem Method 10-204-00-1-X, Digestion and Distillation of Total Cyanide in Drinking and Wastewaters Using MICRO DIST and Determination of Cyanide by Flow Injection Analysis (rev. 2.1 November 30, 2000).
Z10 OI Analytical/ALPKEM, Nitrogen, Total Kjeldahl, Method PAI-DK01 (Block Digestion, Steam Distillation, Titrimetric Detection) (rev. December 22, 1994).
Z11 OI Analytical/ALPKEM, Nitrogen, Total Kjeldahl, Method PAI-DK02 (Block Digestion, Steam Distillation, Colorimetric Detection) (rev. December 22, 1994).
Z12 OI Analytical/ALPKEM, Nitrogen, Total Kjeldahl, Method PAI-DK03 (Block Digestion, Automated FIA Gas Diffusion) (rev. December 22, 1994).
Z13 EPA, Pub. No. EPA-821-R-02-012, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (5th ed. October 2002).

R9-14-613(B)(2):

EPA, Method 8000C: Determinative Chromatographic Separations (rev. 3 March 2003).

R9-14-615(C)(7)(c):

Section D.1.2 of Chapter 5, Appendix D—Essential Quality Control Requirements, in National Environmental Laboratory Accreditation Conference, EPA Pub. No. EPA/600/R-04/003, 2003 NELAC Standard (June 5, 2003).

13. The full text of the rules follows:

TITLE 9. HEALTH SERVICES

**CHAPTER 14. DEPARTMENT OF HEALTH SERVICES
LABORATORIES**

ARTICLE 6. LICENSING OF ENVIRONMENTAL LABORATORIES

Section

ARTICLE 6. LICENSING OF ENVIRONMENTAL LABORATORIES

R9-14-601. Definitions

In addition to the definitions in A.R.S. § 36-495, the following definitions apply in this Article, unless otherwise specified:

1. "Acceptance criteria" means the range of satisfactory test results for a parameter.
2. "ADEQ" means the Arizona Department of Environmental Quality.
3. "Affiliate" means a business organization that:
   a. Controls or has the power to control the business organization that owns the laboratory,
   b. Is controlled by or could be controlled by the business organization that owns the laboratory, or
   c. Could be controlled by a third business organization that could also control the business organization that owns the laboratory.
4. "Alternate method" means an analytical test procedure or technique ~~not listed by parameter in A.A.C. R9-14-611 through R9-14-614, but approved by the Department following the procedures in A.A.C. R9-14-610(B)~~ that is not an approved method and for which approval is requested under R9-14-610(C).
5. "Analyst" means an individual who performs compliance testing at a laboratory.
6. "Analyte" means the substance or chemical constituent being sought or measured in an analytical procedure.

~~6.~~7. "Applicant" means ~~the following individual or individuals requesting a license on behalf of a business organization that owns a laboratory:~~
   ~~a. If the laboratory is owned by a sole proprietor, the individual owning the laboratory;~~
   ~~b. If the laboratory is owned by an unincorporated association, any two individuals who together own a majority interest in the laboratory;~~
   ~~c. If the laboratory is owned by a corporation, any two officers of the corporation;~~

~~d. If the laboratory is owned by a limited liability company, the designated manager or, if no manager is designated, any two members of the limited liability company;~~
~~e. If the laboratory is owned by a partnership, any two of the partners; or~~
~~f. If the laboratory is owned by a governmental entity, the designated director of the laboratory~~ a person or persons requesting an initial or renewal license under R9-14-603, approval of an alternate method or method alteration under R9-14-610(C), or approval of an exemption under R9-14-615(D), and includes, as required under A.R.S. § 36-495.03(D), the owner and, if the owner is not the laboratory director, the laboratory director.

~~7.~~8. "Approved method" means an analytical test procedure or technique authorized by the Department to test for the presence of a particular contaminant or characteristic and includes an alternate method approved by the Director under R9-14-610(C).

~~8.~~9. "ASTM" means American Society for Testing and Materials.

~~9.~~10. "Blind proficiency ~~evaluation audit~~ testing" means the Department's determination of a ~~laboratory's l~~aboratory analyst's ability to analyze samples correctly, accomplished by submitting samples for testing in such a manner that the laboratory analyst is not aware that ~~they are test samples~~ the proficiency testing is occurring.

~~10. "BLS" means Bureau of State Laboratory Services.~~

11. "Business organization" means an entity such as a sole proprietorship, an unincorporated association, a corporation, a limited liability company, a partnership, or a governmental entity.

12. "Calibration curve" means a graphical display of the functional relationship between the instrument or analytical device response and the analyte amount.

13. "Calibration model" means a mathematical form for a calibration curve.

14. "CCC" means calibration check compounds.

15. "CCV" means continuing calibration verification standard.

~~12. "Classification Level I license" means an approval issued by the Department to a laboratory authorizing compliance testing of 1 to 9 total parameters.~~

~~13. "Classification Level II license" means an approval issued by the Department to a laboratory authorizing compliance testing of 10 to 17 total parameters.~~

~~14. "Classification Level III license" means an approval issued by the Department to a laboratory authorizing compliance testing of more than 17 total parameters.~~

~~15.~~16. "Client" means ~~an individual or a business organization~~ a person that submits a sample to a laboratory for compliance testing.

~~16.~~17. "Contaminant" means a matter, pollutant, hazardous substance, or other substance for which a sample is being tested.

~~17.~~18. "Contiguous grounds" means real property that can be enclosed by a single unbroken boundary line that does not enclose property owned or leased by another.

~~18.~~19. "Critical step" means ~~an event~~ a task in the testing procedure that is required to be performed within a specified time period by regulation, method, standard operating procedure, or quality assurance plan.

20. "Current" means up-to-date and extending to the present time.

~~19.~~21. "Data outlier" means a test result that falls outside of acceptance criteria.

~~20.~~22. "Days" means calendar days, excluding the day of the act, event, or default from which a designated period of time begins to run and excluding the last day of the period if it is a Saturday, a Sunday, or a legal holiday, in which event the period runs until the end of the next day that is not a Saturday, a Sunday, or a legal holiday.

23. "DBCP" means 1,2-Dibromo-3-chloropropane.

24. "DDT" means dichloro-diphenyl-trichloroethane.

25. "DOC" means dissolved organic carbon.

26. "ECD" means electron capture detector.

27. "EDB" means 1,2-Dibromoethane.

~~21.~~28. "Effluent" means an outflow, as of a stream that flows out of a facility.

29. "EOX" means extractable organic halides.

30. "EP" means extraction procedure.

~~22.~~31. "EPA" means the United States Environmental Protection Agency.

32. "FID" means flame ionization detector.

33. "FL" means fluorescence.

34. "FT-IR" means Fourier transform infrared.

35. "GC" means gas chromatography.

36. "HEM" means n-Hexane extractable material.

37. "HPLC" means high performance liquid chromatography.

38. "HRGC" means high resolution gas chromatography.

39. "HRMS" means high resolution mass spectrometry.

40. "ICV" means initial calibration verification.

41. "IDOC" means initial demonstration of capability.
~~23.~~42. "Initial Demonstration of Capability" means a test performed by an analyst, as prescribed by a method, to document the analyst's ability to perform the method ~~at the laboratory~~.
~~24.~~43. "Investigation" means an evaluation of ~~laboratory~~ a licensee's or applicant's compliance with A.R.S. Title 36, Chapter 4.3 and this Article conducted by the Department upon its own initiative or upon receipt of a written complaint and may include a laboratory inspection.
44. "IPC" means instrument performance check.
~~25.~~45. "Laboratory inspection" means the Department's ~~initial or annual~~ assessment of ~~a laboratory's~~ operations at a laboratory to determine a licensee's compliance with A.R.S. Title 36, Chapter 4.3 and this Article.
46. "LCS" means laboratory control sample.
47. "Level I license" means an approval issued by the Department authorizing compliance testing of one to nine total parameters at a laboratory.
48. "Level II license" means an approval issued by the Department authorizing compliance testing of 10 to 17 total parameters at a laboratory.
49. "Level III license" means an approval issued by the Department authorizing compliance testing of more than 17 total parameters at a laboratory.
50. "LFB" means laboratory fortified blank.
51. "LFM" means laboratory fortified sample matrix.
~~26.~~52. "Licensee" means a person or persons to whom the Department issues a license to operate a laboratory and includes, as required under A.R.S. § 36-495.03(D), the owner and, if the owner is not the laboratory director, the laboratory director.
53. "Limit of detection" means an analyte- and matrix-specific estimate of the minimum amount of a substance that an analytical process can reliably detect, which may be laboratory dependent and is developed according to R9-14-615(C)(7).
54. "Limit of quantitation" means the minimum levels, concentrations, or quantities of a target variable such as a target analyte that can be reported with a specific degree of confidence.
55. "LOQ" means limit of quantitation.
56. "LRMS" means low resolution mass spectrometry.
~~27.~~57. "Method" means an analytical test procedure or technique.
~~28. "Method detection limit" means the minimum concentration of a contaminant that can be measured and reported with 99% confidence that the concentration of the contaminant is greater than 0, determined from analyzing a sample in a given parameter as prescribed by the individual method or by 40 CFR Part 136 app. B (1998), which is incorporated by reference and on file with the Department and the Office of the Secretary of State. This incorporation by reference contains no future editions or amendments~~.
~~29.~~58. "Method reporting limit" means the minimum concentration of a contaminant ~~that a laboratory routinely reports~~ reported after analyzing a sample in a given parameter, determined after corrections have been made for sample dilution and sample weight.
~~30.~~59. "Mobile laboratory" means a non-stationary facility where ~~analysts test samples~~ compliance testing is performed.
60. "MPN" means most probable number.
61. "MRL" means minimum reporting level.
62. "MS" means mass spectrometry.
63. "MSE" means microscale solvent extraction.
64. "NPD" means nitrogen phosphorous detector.
65. "NPDES" means national pollutant discharge elimination system.
66. "NTU" means nephelometric turbidity units.
67. "ONPG-MUG" means ortho-nitrophenyl-ß-D-galactopyranoside-4-methylumbelliferylb-ß-D-glucuronide.
68. "Owner" means a person that has controlling legal or equitable interest and authority in a laboratory's operations.
69. "PAH" means polynuclear aromatic hydrocarbon.
~~31.~~70. "Parameter" means the combination of a particular type of sample with a particular ~~test~~ approved method by which the sample will be analyzed for a particular ~~contaminant~~ analyte or characteristic.
71. "PB" means particle beam.
72. "PCB" means polychlorinated biphenyls.
73. "PCDD" means polychlorinated dibenzodioxins.
74. "PCDF" means polychlorinated dibenzofurans.
75. "PDA" means photodiode array.
76. "PID" means photoionization detection.
77. "POX" means purgeable organic halides.
78. "Precision" means repeatability of measurement data, specifically the similarity of successive independent measurements of a single magnitude generated by repeated applications of a process under specified conditions.

~~32.~~79. "Proficiency ~~evaluation audit~~ testing" means a proficiency ~~evaluation~~ testing service's determination of a ~~laboratory's~~ laboratory analyst's ability to analyze samples correctly, accomplished by submitting samples to the laboratory for testing and then analyzing the acceptability of the ~~laboratory's~~ results.

~~33.~~80. "Proficiency ~~evaluation~~ testing service" means ~~the Department, the EPA, or~~ an independent service acceptable to the Department and the EPA.

~~34. "Principal State Laboratory System" means the Department, the Bureau of State Laboratory Services, and the Radiation Regulatory Agency Laboratory.~~

81. "Quality assurance plan" means documentation that meets the requirements of R9-14-615(B).

~~35.~~82. "Quality control checks" means the steps taken by ~~a~~ laboratory analysts to monitor the accuracy and precision of ~~its~~ sample analysis ~~of samples~~.

83. "QCS" means quality control sample.

~~36.~~84. "RDX" means Hexahydro-1,3,5-trinitro-1,3,5-triazine.

~~37.~~85. "Records" means all written, recorded, and electronic documentation necessary to reconstruct all laboratory activities that produce data and includes all information relating to the laboratory's equipment, analytical test methods, and related activities.

86. "RPD" means relative percent difference.

87. "Ruggedness" means the ability of a method to withstand changes in environmental factors and produce repeatable results.

~~38.~~88. "Sample" means a specimen that is a representative part of a whole or a single item from a group.

~~39.~~89. "Single laboratory" means an individual laboratory facility or multiple laboratory facilities located on contiguous grounds and ~~owned by the same person~~ having the same owner.

~~40.~~90. "Small business" means a business organization, including its affiliates, that is independently owned and operated, that is not dominant in its field, and that employs fewer than 100 full-time employees or had gross annual receipts of less than $4 million in its last fiscal year.

91. "SOUR" means specific oxygen uptake rate.

92. "SPE" means solid-phase extraction.

93. "SPLP" means synthetic precipitation leaching procedure.

~~41.~~94. "Standard operating procedure" means ~~the reduction to writing of~~ a ~~laboratory's~~ documented ~~method~~ process for carrying on business, analysis, or action, with ~~techniques and procedures~~ instructions for performing routine or repetitive tasks.

~~42.~~95. "Statistical outlier" means an individual data point that has a value far from those of the other data points in a set and that has been determined through statistical analysis to have derived from a different population than the other data points.

96. "TCLP" means toxicity characteristics leaching procedure.

97. "TDS" means total dissolved solids.

98. "TE" means thermal extraction.

99. "TNT" means trinitrotoluene.

100. "TOC" means total organic carbon.

101. "TOX" means total organic halides.

102. "Traceability" means a property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national, or international standards, through an unbroken chain of comparisons all having stated uncertainties.

103. "TS" means thermospray.

104. "TSS" means total suspended solids.

105. "UV" means ultraviolet.

106. "Valid" means that a license, certificate, or other form of authorization is in full force and effect and not suspended.

107. "VOC" means volatile organic compound.

108. "VOST" means volatile organic sampling train.

R9-14-602. Exemptions from Applicability

This Article does not apply to:

1. ~~those~~ The laboratories and parameters exempted by A.R.S. § 36-495.02(A);
2. ~~or to compliance~~ Compliance testing performed under the Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. §§ 136-136y; or
3. An out-of-state laboratory at which only microbiology testing of bottled water is performed and for which the owner holds a current and valid environmental laboratory license or certificate, issued by another state of the United States, that specifically authorizes drinking water testing.

R9-14-603. ~~Initial~~ License Application and Process; Transferability

A. To obtain ~~a~~ an initial or renewal license to operate a laboratory, an applicant shall submit to the Department, within the time prescribed in subsection (C), ~~a~~ an application completed ~~application on~~ using a Department-provided form ~~provided by the Department. The application shall comply with A.R.S. § 36-495.03(A)-(B). An applicant shall submit to the Department the appropriate application fee or fees along with the completed application form.~~

~~B.~~ ~~An applicant shall submit the following information on the application form~~ and including:

1. The name of the laboratory;
2. The current Arizona license number for the laboratory, if any;
3. The current EPA certification number for the laboratory, if any;
~~2.~~4. The physical and mailing ~~address of~~ addresses for the laboratory;
5. The telephone number; fax number; and e-mail address for the laboratory;
~~3.~~6. The name and address of the owner and of each ~~individual and business organization~~ additional person that has an ownership interest in the laboratory;
~~4.~~7. For the owner and each additional business organization with an ownership interest in the laboratory, the name of each officer, principal, and statutory agent;
~~5.~~8. The name of the ~~individual directing the~~ laboratory director;
9. The type of laboratory:
   a. Governmental;
   b. Company, performing internal work only;
   c. Commercial, for profit; or
   d. Other, with a description of the type of laboratory operation;
~~6.~~10. The ~~classification level~~ license Level for which applied;
~~7.~~11. Whether the applicant is applying ~~for~~ to license a single laboratory or multiple laboratories;
~~8.~~12. If the applicant is applying ~~for~~ to license a mobile laboratory, the vehicle make, vehicle identification number, and Arizona vehicle license number of the mobile laboratory;
~~9.~~13. If the applicant is applying ~~for~~ to license a mobile laboratory that is affiliated with a non-mobile laboratory, the name of the non-mobile laboratory;
~~10.~~14. The name, title, and educational background of each individual authorized to sign final reports for the laboratory;
~~11.~~15. A list of the ~~references and methods~~ parameters for which the applicant is requesting ~~a license~~ to be licensed or, if an application for a renewal license, an indication that the applicant desires to be licensed for the same parameters as on the current license;
~~12.~~16. A list of the instruments and equipment ~~that~~ to be used at the laboratory ~~will use~~ for compliance testing or, if an application for a renewal license, an indication that the applicant is using the same instruments and equipment as used under the current license;
~~13.~~17. A list of the software ~~that~~ to be used at the laboratory ~~will use~~ for instrument control and data reduction interpretation or, if an application for a renewal license, an indication that the applicant is using the same software as used under the current license;
~~14.~~18. If the applicant is applying for an out-of-state laboratory, whether the applicant wants ~~the laboratory~~ to receive technical updates at the laboratory by ~~facsimile transmission~~ fax or through the Internet;
~~15. If the applicant is applying as a small business for a private laboratory and wants to pay method, instrument, and proficiency evaluation fees in installments, the applicant shall provide the following information:~~
   ~~a. A list of the affiliates of the business organization that owns the laboratory;~~
   ~~b. The relationship between each affiliate and the business organization that owns the laboratory;~~
   ~~c. Whether the laboratory is independently owned and operated;~~
   ~~d. The type of business organization that owns the laboratory;~~
   ~~e. If the business organization that owns the laboratory is a corporation, whether the stock of the corporation or any of its affiliates is publicly traded;~~
   ~~f. The number of individuals employed full-time by the business organization that owns the laboratory;~~
   ~~g. The number of individuals employed full-time by each affiliate of the business organization that owns the laboratory;~~
   ~~h. Whether the gross annual receipts of the business organization that owns the laboratory were less than or greater than or equal to $4,000,000 in the last fiscal year;~~
   ~~i. Whether the combined gross annual receipts of the affiliates of the business organization that owns the laboratory were less than or greater than or equal to $4,000,000 in the last fiscal year; and~~
   ~~j. Whether the business organization that owns the laboratory is dominant in its field;~~
19. If an application for an initial license:
   a. A copy of a proficiency testing report for the state in which the laboratory is located or, if that state does not require proficiency testing, for another state in which the laboratory is licensed or certified, for the current or most recently completed year, for each of the parameters for which licensure is requested;

b. A list of the states in which the laboratory is licensed or certified and the corresponding license or certificate number for each state; and
c. A copy of a current quality assurance plan for the laboratory;

20. If an application for a renewal license:
a. A copy of a current standard operating procedure, limit of detection, and proficiency testing report, if available, for each parameter newly requested on the application; and
b. If the applicant desires to make payments in installments as permitted under R9-14-608, an indication of this and the period of time during which the fees will be paid;

21. The fees required under R9-14-607 and R9-14-608, payable to the Arizona Department of Health Services by credit card; certified check; business check; or money order; or, if the owner is an Arizona state agency, purchase order;

22. Attestation that the owner and the laboratory director are aware of all applicable requirements in A.R.S. Title 36, Chapter 4.3 and this Article and that the information provided in the application, including the information in the documents accompanying the application form, is accurate and complete; and

~~16.~~23.~~A notarized statement by the applicant and the~~ The dated signature, made under oath, of the laboratory director ~~of the laboratory verifying the information on the application~~ and:
a. If the owner is an individual, the individual;
b. If the owner is a corporation, an officer of the corporation;
c. If the owner is a partnership, one of the partners;
d. If the owner is a limited liability company, a manager or, if the limited liability company does not have a manager, a member of the limited liability company;
e. If the owner is an association or cooperative, a member of the governing board of the association or cooperative;
f. If the owner is a joint venture, one of the individuals signing the joint venture agreement;
g. If the owner is a governmental agency, the individual in the senior leadership position with the agency or an individual designated in writing by that individual; and
h. If the owner is a business organization type other than those described in subsections (A)(23)(b) through (f), an individual who is a member of the business organization.

~~C.~~**B.** ~~The~~ An application may include an agreement between the applicant and the Department that the Department may submit supplemental requests for additional information.

C. An applicant shall submit an application:
1. For an initial license for an in-state laboratory, at least 30 days before the applicant intends to begin operating the in-state laboratory;
2. For an initial license for an out-of-state laboratory, at least 60 days before the applicant intends to begin performing Arizona compliance testing;
3. For a renewal license for an in-state laboratory, at least 30 days before the expiration date of the current license; and
4. For a renewal license for an out-of-state laboratory, at least 60 days before the expiration date of the current license.

~~**D.** Multiple laboratories located on contiguous grounds and owned by the same person may be:~~
~~1. Licensed as a single laboratory, or~~
~~2. Licensed separately if the applicant submits an application and an application fee as required by A.A.C. R9-14-607(A) for each laboratory.~~

D. The Department may issue a single laboratory license for:
1. A single laboratory;
2. Multiple laboratories that are located on contiguous grounds and have the same owner, if the applicant submits one application and combined fees for the laboratories; or
3. Multiple laboratories, including mobile laboratories, that have the same owner but are not located on contiguous grounds, if:
a. The applicant submits a separate application and fees for each laboratory,
b. Each non-mobile laboratory is located in Arizona, and
c. Each mobile laboratory has a current and valid Arizona vehicle registration.

~~**E.** Multiple laboratories, including mobile laboratories, located on noncontiguous grounds and owned by the same person may be:~~
~~1. Licensed separately, or~~
~~2. Operated under a single license if:~~
~~a. The applicant submits an application and an application fee as required by A.A.C. R9-14-607(B) for each laboratory,~~
~~b. Each non-mobile laboratory is located in Arizona, and~~
~~c. Each mobile laboratory maintains an Arizona vehicle registration.~~

E. The Department shall not issue a single laboratory license for multiple laboratories that do not meet the requirements of subsection (D)(2) or (3).

F. ~~An application is not complete without payment of~~ The Department shall not consider an applicant to comply with the

requirements for licensure, as provided under A.R.S. § 36-495.09(A)(5), if the applicant does not pay the appropriate ~~application fee or~~ fees ~~and payment of the amount billed under A.A.C. R9-14-608(C)~~ required under R9-14-607 and R9-14-608.

G. The Department shall process an application as provided in R9-14-621.

H. A laboratory license is valid only for the facility or facilities for which it is issued and cannot be transferred to another facility.

I. A laboratory license is valid only in the name of the persons to whom it is issued and expires upon a change in laboratory name, laboratory director, or ownership, unless within 20 business days after the change, the Department receives written notice of the change and an application for a new license.

J. The Department shall not charge a fee for a license application submitted under subsection (I) and shall issue a new license reflecting the change upon determining continued compliance with A.R.S. Title 36, Chapter 4.3 and this Article.

R9-14-604. ~~Regular License Renewal Process~~ Third Party Accreditation

~~**A.** To renew a regular license, an applicant shall submit to the Department an application completed on the same type of form used for an initial license. An applicant shall submit to the Department the appropriate application fee or fees along with the completed application form.~~

~~**B.** If the applicant is applying for an in-state laboratory, the applicant shall submit the completed application at least 30 days before expiration of the current license.~~

~~**C.** If the applicant is applying for an out-of-state laboratory, the applicant shall submit the completed application at least 60 days before expiration of the current license.~~

~~**D.** An application is not complete without payment of the appropriate application fee or fees and payment of the amount billed under A.A.C. R9-14-608(C).~~

A. A laboratory that holds current and valid accreditation issued by the National Voluntary Laboratory Accreditation Program administered by the National Institute of Standards and Technology is exempt from licensure under this Article, as authorized under A.R.S. § 36-495.02, for the term of the accreditation.

B. If a laboratory's accreditation issued by the National Voluntary Laboratory Accreditation Program expires or is suspended, revoked, or voluntarily terminated, the laboratory is required to be licensed as provided under A.R.S. Title 36, Chapter 4.3 and this Article.

R9-14-605. Compliance Monitoring

~~**A.** The Department shall conduct a laboratory inspection and may conduct an investigation or proficiency evaluation audit, or both, of an applicant's laboratory as part of the substantive review for an initial license.~~

~~1. The Department shall commence the laboratory inspection, investigation, or proficiency evaluation audit, or combination of the 3, no more than 30 days after notice of administrative completeness has been mailed for an in-state laboratory or no more than 60 days after notice of administrative completeness has been mailed for an out-of-state laboratory.~~

~~2. The Department and applicant may mutually agree in writing to extend the laboratory inspection, investigation, or proficiency evaluation audit dates.~~

~~**B.**~~**A.** The Department may conduct a laboratory inspection, investigation, or proficiency ~~evaluation audit~~ testing, or any combination of the ~~3~~ three, ~~of a licensee's or applicant's laboratory~~ at any ~~other~~ time before or during ~~the~~ a laboratory's license period.

B. In determining whether to conduct an annual laboratory inspection, the Department shall consider:

1. The Department's findings at the last two laboratory inspections;
2. The licensee's adherence to any corrective action plans created as a result of the last two laboratory inspections;
3. Whether there has been a change in ownership or laboratory director since the last laboratory inspection;
4. The extent to which the compliance testing performed at the laboratory has changed since the last laboratory inspection or would change as a result of a renewal application; and
5. Performance on the most recent proficiency testing completed at the laboratory.

C. For a laboratory at which drinking water compliance testing is performed, the Department shall conduct a laboratory inspection at least every three years or as otherwise required by the EPA.

~~**C.**~~**D.** The Department shall comply with A.R.S. § 41-1009 in conducting laboratory inspections and investigations that occur at a laboratory.

~~**D.**~~**E.** If the Department determines based on a laboratory inspection, investigation, or proficiency ~~evaluation audit~~ testing, or any combination of the ~~3~~ three, that a ~~laboratory is not~~ laboratory owner, officer, agent, or employee has engaged in conduct described under A.R.S. § 36-495.09(A) ~~in compliance with A.R.S. Title 36, Chapter 4.3 and this Article~~, the Department shall request that the licensee or applicant submit to the Department a written corrective action plan, unless the Department determines one of the following, in which case the Department ~~shall~~ may take action under A.R.S. § 36-495.09:

1. That the deficiencies were committed intentionally;

2. That the deficiencies cannot be corrected within a reasonable period of time;
3. That the deficiencies are evidence of a pattern of noncompliance;
4. That the deficiencies are a risk to any person; the public health, safety, or welfare; or the environment; or
5. That there is a reasonable belief, as stated in A.R.S. § 36-495.09(B), that a violation of A.R.S. § 36-495.09(A)(5) has occurred and that the life or safety of the public is immediately affected.

~~E.~~**F.** ~~A corrective action plan shall be in writing and shall include the corrective action that will be taken and the date by which corrective action will be completed, which cannot be more than 120 days after the date that the Department requested the corrective action plan.~~

~~1. A licensee shall submit a corrective action plan to the Department within 45 days from the date that the Department requested the corrective action plan.~~

~~2. An applicant shall submit a corrective action plan to the Department within 28 days the date that the Department requested the corrective action plan.~~ Within 30 days after receiving a request for a written corrective action plan, a licensee or applicant shall submit to the Department a written corrective action plan that includes the following for each identified deficiency:

1. A description of how the deficiency will be corrected, and
2. A date of correction for the deficiency.

G. The Department shall accept a written corrective action plan if it:

1. Describes how each identified deficiency will be corrected, and
2. Includes a date for correcting each deficiency as soon as practicable based upon the actions necessary to correct the deficiency.

~~F.~~**H.** If the Department disapproves a corrective action plan, the Department shall send to the licensee or applicant a written notice of disapproval requesting that the licensee or applicant submit to the Department a revised corrective action plan for the items that the Department ~~disapproved~~ disapproves.

1. A licensee or an applicant shall submit ~~the~~ a revised corrective action plan to the Department within 21 days ~~from~~ after the date of ~~the~~ a written notice of disapproval.
2. If a licensee or an applicant does not submit a revised corrective action plan within 21 days ~~from~~ after the date of ~~the~~ a written notice of disapproval, the Department may ~~deny the application or~~ take ~~any other~~ action ~~authorized by law~~ under A.R.S. § 36-495.09.

~~G.~~**I.** A licensee or ~~an~~ applicant shall notify the Department when corrective action has been completed.

~~H.~~**J.** ~~The~~ Within 30 days after receiving notice that corrective action has been completed, the Department shall determine ~~if~~ whether each deficiency has been corrected and whether the corrective action brings the ~~a~~ laboratory operations ~~is in~~ into substantial compliance with A.R.S. Title 36, Chapter 4.3 and this Article ~~within 30 days of notification that the corrective action has been completed~~.

K. If the Department determines that ~~the~~ a licensee or applicant has not corrected ~~the deficiencies~~ a deficiency or that the licensee or applicant has not corrected ~~the deficiencies~~ a deficiency within a reasonable period of time, the Department may take any enforcement action authorized by law as a result of the ~~deficiencies~~ deficiency.

~~I.~~**L.** Under A.R.S. § 41-1009(G), the Department's decision regarding whether a licensee or ~~an~~ applicant may submit a corrective action plan ~~to correct deficiencies identified in a laboratory inspection or investigation at the laboratory~~ or whether ~~these deficiencies have~~ a deficiency has been corrected or ~~have~~ has ~~not~~ been corrected within a reasonable period of time is not an appealable agency action as defined by A.R.S. § 41-1092.

R9-14-606. Provisional Licensing

A. The Department may issue a provisional license to a licensee when the Department suspends the licensee's regular license because of deficiencies identified in an investigation, laboratory inspection, or proficiency ~~evaluation audit~~ testing or any combination of the three.

B. The Department shall issue an amended ~~certified~~ list of parameters for a provisional license.

C. A licensee shall return its regular license to the Department within 14 days ~~from~~ after ~~the date of receipt of~~ receiving written notification of ~~the~~ license suspension.

D. A provisional license is valid for a set period established by the Department, not to exceed 12 months.

E. A licensee with a provisional license who desires to ~~renew the laboratory's~~ obtain a regular license shall apply for ~~renewal~~ an initial license at least 30 days before ~~expiration of~~ the provisional license expires.

F. The Department shall issue a regular license ~~renewal unless the Director determines that~~ as described in subsection (E) only upon determining that ~~the licensee is not in~~ a licensee is in full compliance with the corrective action plan; A.R.S. Title 36, Chapter 4.3; and this Article.

~~F.~~**G.** The Department shall not issue a provisional license to an applicant for an initial license.

R9-14-607. Fees

~~A. An applicant applying for a single license for a single laboratory shall submit to the Department, at the time of application, the following non-refundable application fee:~~

1. For a classification Level I license: $1,300.00
2. For a classification Level II license: $1,651.00
3. For a classification Level III license $1,820.00

B. An applicant applying for a single license for multiple laboratories not on contiguous grounds shall submit to the Department, at the time of application, a non-refundable application fee for each noncontiguous laboratory, as follows:

1. For a classification Level I license: $1,118.00
2. For a classification Level II license: $1,469.00
3. For a classification Level III license: $1,651.00

C. A licensee or an applicant shall submit to the Department a non-refundable fee for licensing each approved method, alternate method, and associated instrument requested on the application or during the license period, as follows:

1. Microbiology Testing Fees
   a. Total coliform:
      i. Most Probable Number: $177.00
      ii. Membrane filtration: 177.00
      iii. Colilert: 118.00
      iv. Colisure: 118.00
      v. Presence-Absence: 177.00
   b. Fecal coliform:
      i. Most Probable Number: 177.00
      ii. Membrane filtration: 177.00
   c. Fecal streptococcus:
      i. Most Probable Number: 177.00
      ii. Membrane filtration: 177.00
   d. Salmonella: 177.00
   e. Heterotrophic plate count: 118.00
   f. Any one approved method in each group for total coliform, fecal coliform, fecal streptococcus, Salmonella, and heterotrophic plate count: 530.00
   g. Any combination of approved methods for total coliform, fecal coliform, fecal streptococcus, Salmonella, and heterotrophic plate count: 943.00
   h. Viruses: 295.00
   i. Parasites: 295.00
   j. Microscopic Particulate Analysis: 199.00
2. Bioassay
   Any combination of methods for estimating the chronic and acute toxicity of effluents and waters to fresh water organisms:$707.00
3. Demand
   a. Biochemical Oxygen Demand: $118.00
   b. Chemical Oxygen Demand: 118.00
4. Inorganic Chemistry - Metals
   a. Flame atomic absorption approved methods.
      i. Each metal for which the laboratory applies using any single flame atomic absorption approved method from any single approved method reference: $20.00 each, up to a maximum of $384.00
      ii. Each metal for which the laboratory applies using any combination of flame atomic absorption approved methods from any combination of approved method references: $31.00 each, up to a maximum of $608.00
   b. Electrothermal graphite furnace atomic absorption approved methods.
      i. Each metal for which the laboratory applies using any single graphite furnace atomic absorption approved method from any single approved method reference: $20.00 each, up to a maximum of $354.00
      ii. Each metal for which the laboratory applies using any combination of graphite furnace atomic absorption approved methods from any combination of approved method references: $31.00 each, up to a maximum of $566.00
   c. Inductively coupled plasma emission spectrometer approved methods.
      i. Each metal for which the laboratory applies using any single inductively coupled plasma approved method from any single approved method reference: $16.00 each, up to a maximum of $338.00
      ii. Each metal for which the laboratory applies using any combination of inductively coupled plasma approved methods from any combination of approved method references: $23.00 each, up to a maximum of $507.00
   d. Inductively coupled plasma/mass spectrometer approved methods. Each metal for which the laboratory applies using any inductively coupled plasma/mass spectrometer approved method from any approved method reference: $23.00 each, up to a maximum of $507.00
   e. Colorimetric metal testing approved methods. Each colorimetric approved method for which the laboratory

applies: $59.00

f. Mercury cold vapor approved methods.
   i. Any single mercury cold vapor approved method from any single approved method reference for which the laboratory applies: $118.00
   ii. Any combination of mercury cold vapor approved methods from any combination of approved method references for which the laboratory applies: $177.00

g. Metals by hydride generation approved methods. Each hydride metal for any approved method from any approved method reference for which the laboratory applies: $59.00 each, up to a maximum of $88.00

5. Inorganic Chemistry - Nonmetals
   a. Nonmetals Group IA
      i. Alkalinity: $30.00
      ii. Chloride: 30.00
      iii. Chlorine: 30.00
      iv. Chlorine dioxide: 30.00
      v. Color: 30.00
      vi. Hardness (as CaCO3): 30.00
      vii. Hydrogen ion (pH): 30.00
      viii. Ozone: 30.00
      ix. Specific conductance: 30.00
      x. Total Dissolved Solids (Filterable Residue): 30.00
      xi. Turbidity: 30.00
   b. Nonmetals Group IB
      i. Nitrate: $59.00
      ii. Sulfate: 59.00
      iii. Fluoride: 59.00
      iv. Sodium Azide: 59.00
      v. Sodium/Potassium Perchlorate: 59.00
   c. Maximum for any combination of Nonmetals Group IA and IB for the first approved method for which the laboratory applies: $332.00
   d. Each additional Nonmetals Group IA approved method for which the laboratory applies: $14.00
   e. Each additional Nonmetals Group IB approved method for which the laboratory applies: $30.00
   f. Nonmetals Group IIA
      i. Acidity: $30.00
      ii. Total Hardness: 30.00
      iii. Surfactants: 30.00
      iv. Total Residue: 30.00
      v. Nonfilterable Residue: 30.00
      vi. Settleable Residue: 30.00
      vii. Volatile Residue: 30.00
   g. Nonmetals Group IIB
      i. Ammonia: $59.00
      ii. Bromide: 59.00
      iii. Kjeldahl Nitrogen: 59.00
      iv. Nitrite: 59.00
      v. Orthophosphate: 59.00
      vi. Phosphorus: 59.00
   h. Maximum for any combination of Nonmetals Group IIA and IIB for the first approved method for which the laboratory applies: $442.00
   i. Each additional Nonmetals Group IIA approved method for which the laboratory applies: $14.00
   j. Each additional Nonmetals Group IIB approved method for which the laboratory applies: $30.00
   k. Ion chromatograph approved methods. Each ion for which the laboratory applies using any ion chromatograph approved method from any approved method reference: $26.00 each, up to a maximum of $260.00
6. Major Analytical Chemistry Instruments
   a. Each Gas Chromatograph instrument: $59.00
   b. Each Gas Chromatograph/Mass Spectrometer instrument: $118.00
   c. Each Atomic Absorption Spectrometer instrument: $59.00
   d. Each Inductively Coupled Plasma Atomic Emission Spectrometer instrument: $59.00
   e. Each Inductively Coupled Plasma Atomic Emission Spectrometer/Mass Spectrometer instrument: $118.00
   f. Each High Performance Liquid Chromatograph instrument: $59.00

g. Each High Performance Liquid Chromatograph/Mass Spectrometer instrument: $118.00
h. Each Ion Chromatograph instrument: $59.00
i. Each Total Organic Halide instrument: $59.00
j. Each Transmission Electron Microscope: $237.00
k. Each X-Ray Diffraction instrument: $59.00

7. Volatile Organic Chemistry

		Single Method	Combination
a.	Volatile Organics by EPA Methods 502.2, 8021B	$118.00	$177.00
b.	Purgeable Halocarbons by EPA Method 601	59.00	
c.	Total Trihalomethanes by EPA Methods 502.2, 524.2, 551.1	59.00	118.00
d.	Purgeable Aromatics by EPA Methods 602, 8015B	59.00	118.00
e.	Fuel Class Hydrocarbons by 8015AZ	59.00	
f.	Acrolein, Acrylonitrile, and Acetonitrile by EPA Methods 603, 8031, 8032A, 8033	59.00	88.00
g.	Acrylamide, Acrylonitrile, and Acrolein by EPA Method 8316	59.00	
h.	Purgeables by EPA Methods 524.2, 624, 1624, 8260B	118.00	235.00

8. Semivolatile Organic Chemistry

		Single Method	Combination
a.	Aniline and Derivatives by EPA Method 8131	$90.00	
b.	Benzidines by EPA Method 605	59.00	
c.	Benzidines and Nitrogen Pesticides by EPA Method 553	90.00	
d.	Bis(2-chloroethyl)ether Hydrolysis Products by EPA Method 8430	90.00	
e.	Carbamates/Urea Pesticides by EPA Methods 531.1, 632, 8318	90.00	133.00

~~f.~~	~~Carbonyl Compounds by EPA Method 8315A~~	~~90.00~~	
~~g.~~	~~Chlorinated Herbicides by EPA Methods 515.2, 555, 8151A, Standard Methods 6640 B, ASTM D 3478 85~~	~~90.00~~	~~133.00~~
~~h.~~	~~Chlorinated Hydrocarbons by EPA Methods 612, 8121~~	~~90.00~~	~~133.00~~
~~i.~~	~~1,2 Dibromoethane and 1,2 Dibromo 3 Chloropropane by EPA Methods 504.1, 551.1, 8011, BLS Method 127~~	~~90.00~~	~~133.00~~
~~j.~~	~~Diquat and Paraquat by EPA Method 549.2~~	~~90.00~~	
~~k.~~	~~Endothall by EPA Method 548.1~~	~~90.00~~	
~~l.~~	~~Glyphosate by EPA Methods 547, 6651~~	~~90.00~~	~~133.00~~
~~m.~~	~~Haloacetic Acids by EPA Methods 552.1 and 552.2~~	~~90.00~~	~~133.00~~
~~n.~~	~~Haloethers by EPA Methods 611, 8111~~	~~90.00~~	~~133.00~~
~~o.~~	~~Nitroaromatics and Cyclic Ketones by EPA Methods 609, 8091~~	~~90.00~~	~~133.00~~
~~p.~~	~~Nitroaromatics and Nitramines by EPA Method 8330~~	~~90.00~~	
~~q.~~	~~Nitroglycerine by EPA Method 8332~~	~~90.00~~	
~~r.~~	~~Nitrosamines by EPA Methods 607, 8070A~~	~~90.00~~	~~133.00~~
~~s.~~	~~Nonvolatiles by EPA Methods 8321A, 8325~~	~~118.00~~	~~177.00~~
~~t.~~	~~Organochlorine Pesticides/Polychlorinated Biphenyls by EPA Methods 505, 508, 508.1, 608, 8081, 8082, Standard Method 6630C, ASTM Method D3086 85, EPA 600/4 81 045~~	~~118.00~~	~~177.00~~

~~u.~~	~~Organophosphorus and Nitrogen Pesticides by EPA Methods 507, 614, 1657, 8141A~~	~~90.00~~	~~133.00~~
~~v.~~	~~Phenols by EPA Methods 604, 8041~~	~~90.00~~	~~133.00~~
~~w.~~	~~Polynuclear Aromatic Hydrocarbons by EPA Methods 550, 550.1, 610, 8100, 8310~~	~~90.00~~	~~133.00~~
~~x.~~	~~Phthalate Esters by EPA Methods 506, 606, 8061A~~	~~90.00~~	~~133.00~~
~~y.~~	~~Semivolatile organics by EPA Methods 525.2, 625, 1625, 8270C~~	~~118.00~~	~~237.00~~
~~z.~~	~~Semivolatile organics by EPA Method 8410~~	~~90.00~~	
~~aa.~~	~~Tetrazine by EPA Method 8331~~	~~90.00~~	
~~bb.~~	~~Triazine Pesticides by EPA Method 619~~	~~90.00~~	
~~cc.~~	~~Dioxin and Furans by EPA Methods 613, 1613, 8280A, 8290~~	~~354.00~~	~~471.00~~

~~9. Radiochemicals~~
- ~~a. Fee for radiochemistry testing: $351.00~~
- ~~b. Each radioisotope counting instrument: 59.00~~
- ~~c. Gross Alpha Activity: 118.00~~
- ~~d. Gross Beta Activity: 118.00~~
- ~~e. Radium-226: 118.00~~
- ~~f. Radium-228: 118.00~~
- ~~g. Cesium 118.00~~
- ~~h. Iodine: 118.00~~
- ~~i. Polonium-210: 118.00~~
- ~~j. Radon: 118.00~~
- ~~k. Strontium-89: 118.00~~
- ~~l. Strontium-90: 118.00~~
- ~~m. Tritium: 118.00~~
- ~~n. Uranium: 118.00~~
- ~~o. Photon Emitters, each method: 118.00~~
- ~~p. Each radiochemical approved method when the laboratory applies for five or more: 95.00.~~

~~10. Hazardous Characteristic Testing Approved Methods (*The fees for these procedures are for the sample extraction and leaching processes only.)~~
- ~~a. Corrosivity toward steel: $49.00~~
- ~~b. Ignitability: 49.00~~
- ~~c. Reactivity: 49.00~~
- ~~d. Extraction Procedure Toxicity Characteristic*: 118.00~~
- ~~e. Toxicity Characteristic Leaching Procedure*: 235.00~~
- ~~f. Synthetic Characteristic Leaching Procedure*: 235.00~~

~~11. Miscellaneous Compliance Testing~~
- ~~a. Total Organic Carbon: $59.00~~
- ~~b. Total Organic Halides: 59.00~~
- ~~c. Purgeable Organic Halides: 88.00~~
- ~~d. Extractable Organic Halides: 88.00~~
- ~~e. Ethylene Glycol: 118.00~~
- ~~f. Total Petroleum Hydrocarbon: 118.00~~
- ~~g. Oil and Grease: 59.00~~
- ~~h. Cyanide; total, direct, and amenable to chlorination: 118.00~~
- ~~i. Total Phenols: 118.00~~
- ~~j. Lead in paint: 30.00~~
- ~~k. Magnesium - gravimetric: 30.00~~
- ~~l. Sulfide: 59.00~~
- ~~m. Sulfite: 59.00~~
- ~~n. Silica: 59.00~~
- ~~o. Bulk Asbestos Identification: 177.00~~
- ~~p. White Phosphorous: 90.00~~
- ~~q. Each Immunoassay Test: 59.00~~
- ~~r. Compatibility Test for Wastes and Membrane Liners: 26.00~~
- ~~s. Cation-Exchange Capacity of Soil: 26.00~~
- ~~t. Asbestos fiber counting by:~~
  - ~~i. Light microscopy: 177.00~~
  - ~~ii. Electron microscopy: 295.00~~
  - ~~iii. Electron microscopy with X-Ray Diffraction: 390.00~~

~~12. Ambient Air Compliance Testing Approved Methods~~
- ~~a. Carbon Monoxide: $235.00~~
- ~~b. Hydrocarbons: 235.00~~
- ~~c. Lead: 235.00~~
- ~~d. Nitrogen Dioxide: 235.00~~
- ~~e. Ozone: 235.00~~
- ~~f. Particulate Matter: 235.00~~
- ~~g. Sulfur Oxides: 235.00~~
- ~~h. Maximum for ambient air testing: 1,238.00~~

~~13. Air - Stationary Sources and Stack Testing Approved Methods~~
- ~~a. Carbon Dioxide/Oxygen/Excess Air: $235.00~~
- ~~b. Carbon Monoxide: 235.00~~
- ~~c. Carbonyl Sulfide/Carbon Dioxide: 235.00~~
- ~~d. Fluoride: 235.00~~
- ~~e. Gaseous Organic Compounds: 235.00~~
- ~~f. Hydrogen Sulfide: 235.00~~
- ~~g. Inorganic Lead: 235.00~~
- ~~h. Moisture Content: 235.00~~
- ~~i. Nitrogen Oxide: 235.00~~
- ~~j. Particulate Emissions:~~
  - ~~i. Asphalt Processing: 118.00~~
  - ~~ii. Fiberglass Insulation: 118.00~~
  - ~~iii. Nonsulfate: 118.00~~
  - ~~iv. Nonsulfuric Acid: 118.00~~
  - ~~v. Pressure Filters: 118.00~~
  - ~~vi. Stationary Sources: 118.00~~
  - ~~vii. Sulfur Dioxide: 118.00~~
  - ~~viii. Wood Heaters: 118.00~~
  - ~~ix. Particulate emissions maximum: 707.00~~
- ~~k. Sulfur and Total Reduced Sulfur: 235.00~~
- ~~l. Sulfur Dioxide: 235.00~~
- ~~m. Sulfuric Acid Mist: 235.00~~
- ~~n. Toxic Organic Compounds in Ambient Air by Method TO-15: 118.00~~
- ~~o. Volatile Matter/Density/Solids/Water: 235.00~~
- ~~p. Vapor Tightness - Gasoline Delivery Tank: 235.00~~

~~q. Volatile Organic Compounds: 235.00~~
~~r. Wood Heaters Certification and Burn Rates: 235.00~~
~~s. Stationary Sources and Stack Testing maximum: 3,536.00~~
~~t. Petroleum product analysis:~~
~~i. Hydrometer method: 59.00~~
~~ii. Sulfur: 118.00~~
~~iii. Heat of Combustion: 59.00~~
~~14. Arizona Emission Test Approved Methods~~
~~a. Sulfuric Acid Mist/Sulfur Oxides: $235.00~~
~~b. Dry Matter: 235.00~~
~~15. Hazardous Air Pollutant Approved Methods for National Emission Standards~~
~~a. Arsenic: $235.00~~
~~b. Beryllium: 235.00~~
~~c. Mercury: 235.00~~
~~d. Polonium-210: 235.00~~
~~e. Vinyl Chloride: 235.00~~
~~f. Maximum for hazardous air pollutants: 884.00~~
~~16. When an alternate method is a revision of a method listed in A.A.C. R9-14-611 through A.A.C. R9-14-614, the fee is the same as for the listed method, unless the technology of the alternate method is different from that of the listed method. All other alternate method fees are charged as follows:~~
~~a. Alternate Gas Chromatography method: $90.00~~
~~b. Alternate Gas Chromatography/Mass Spectrometry method: 118.00~~
~~c. Alternate miscellaneous method: 58.00~~

~~**D.** An applicant shall submit to the Department a non-refundable administrative fee of $101.00 for all proficiency evaluation audits to occur during the license period.~~

~~**E.** An applicant for an out-of-state laboratory shall submit to the Department an annual fee of $98.00 if the applicant chooses to receive technical updates from the Department by facsimile transmission.~~

A. Except as provided in R9-14-608, an applicant shall submit the following fees to the Department with each application for an initial or renewal license:
1. The cumulative method and instrumentation fees for each laboratory, as determined according to Tables 1 and 2 in Exhibit I;
2. The following application fees:
   a. If applying for a single license for a single laboratory, which may include multiple laboratories located on contiguous grounds and having the same owner, the following fee:
      i. For a Level I license, $1677;
      ii. For a Level II license, $2130; or
      iii. For a Level III license, $2348; or
   b. If applying for a single license for multiple laboratories not located on contiguous grounds, the following fee for each laboratory:
      i. For a Level I license, $1442;
      ii. For a Level II license, $1895; and
      iii. For a Level III license, $2130;
3. An administrative fee of $130 for the proficiency testing to occur during the license period; and
4. If applying for an out-of-state laboratory, an annual information update fee of $126.

~~**F.** A licensee that requests to change its license by adding a parameter to the license before its expiration date shall pay all applicable licensing fees. A licensee may delete parameters at no charge three times during a license period. Thereafter, the Department shall charge $13.00 per parameter for processing each deletion.~~

B. The fees paid to the Department under this Article are nonrefundable.

R9-14-608. Installment Payment of Fees by Small Businesses

~~**A.** Upon receipt of a license application, the Department calculates the amount owed by the applicant by adding together the following:~~
~~1. The fees for the methods and instruments for which licensure is requested on the application, as provided in A.A.C. R9-14-607(C);~~
~~2. The proficiency evaluation audit fee, as provided in A.A.C. R9-14-607(D); and~~
~~3. The technical update fee, as provided in A.A.C. R9-14-607(E), if the applicant is applying for an out-of-state laboratory and has requested to receive technical updates from the Department by facsimile transmission.~~

A. A licensee may, for license renewal, pay the fees calculated under R9-14-607(A)(1), (3), and (4) to the Department in 12 or fewer installments if the laboratory owner is a small business.

B. A licensee who desires to make payments in installments as described in subsection (A) shall indicate this on the application for license renewal and shall indicate the period of time during which the fees will be paid, which shall be 12 or fewer months.

~~B.~~ C. ~~If a laboratory is owned by a small business, the applicant may submit the amount calculated under subsection (A) to the Department in 12 equal installments, with~~ A licensee making installment payments shall submit the first installment ~~billed by~~ to the Department ~~as described in subsection (C)~~ along with the application for license renewal and the application fee calculated under R9-14-607(A)(2), and ~~an~~ each subsequent installment ~~due on~~ by the first day of each month ~~for 11 months~~ thereafter for the period of time indicated on the application or until the fees are paid in full, whichever comes first.

~~C. After calculating the total fee as described in subsection (A), the Department shall send the applicant a notice of administrative deficiencies and a bill showing the following amount due:~~

~~1. If the laboratory is owned by a small business, the amount of the first installment; or~~

~~2. If the laboratory is not owned by a small business, the total amount calculated under subsection (A).~~

D. A licensee shall ensure that each installment paid is at least equal to the amount calculated by dividing the total fees due under R9-14-607(A)(1), (3), and (4) by the number of months indicated as the period of payment on the application for license renewal.

~~D.~~ E. If ~~an applicant or~~ a licensee ~~for a laboratory owned by a small business~~ fails to submit an installment within seven days ~~from~~ after its due date, the Department shall charge a ~~$20.00~~ $50.00 fee for processing the late payment. ~~If an applicant or licensee for a laboratory owned by a small business fails to submit an installment within 30 days from its due date, the Department may initiate action under A.R.S. § 36-495.09.~~

F. If a licensee fails to submit an installment within 30 days after its due date, the Department may initiate action under A.R.S. § 36-495.09.

R9-14-609. Proficiency ~~Evaluation~~ Testing

A. ~~Once~~ At least once in each 12-month period, ~~or~~ and more often if requested by the Department, each ~~laboratory shall~~ licensee or applicant that performs drinking water compliance testing shall have at least one laboratory analyst demonstrate proficiency in drinking water compliance testing by participating in ~~a~~ proficiency ~~evaluation audit~~ testing provided by the ~~Principal State Laboratory System~~ Department, the EPA, or a proficiency ~~evaluation~~ testing service.

B. ~~The laboratory~~ Each proficiency testing for drinking water compliance testing shall ~~analyze~~ include at least one proficiency ~~evaluation samples~~ testing sample for each parameter for which an initial license or renewal license has been issued or requested ~~and for which proficiency evaluation samples are available~~. If more than one method is used to test for an analyte, a different lot shall be used for each method.

C. At least once in each 12-month period, and more often if requested by the Department, each licensee or applicant that does non-drinking-water compliance testing shall have at least one laboratory analyst demonstrate proficiency in non-drinking-water compliance testing by participating in proficiency testing provided by the Department, the EPA, or a proficiency testing service, if proficiency testing is available.

D. Each proficiency testing for non-drinking-water compliance testing shall include at least one proficiency testing sample for each parameter for which an initial license or renewal license has been issued or requested and for which proficiency testing samples are available.

E. ~~For a laboratory to~~ To demonstrate proficiency for a parameter, test results reported ~~by the laboratory~~ for the parameter shall be within acceptance ~~criteria~~ limits established by:

1. For drinking water inorganic chemistry parameters, the EPA, as provided in 40 CFR 141.23;
2. For drinking water organic chemistry parameters, the EPA, as provided in 40 CFR 141.24;
3. For lead or copper in drinking water, the EPA, as provided in 40 CFR 141.89;
4. For disinfection byproducts in drinking water, the EPA, as provided in 40 CFR 141.131; and
5. For other parameters, the ~~Principal State Laboratory System~~ Department, the EPA, or the proficiency ~~evaluation~~ testing service.

~~1. To maintain a license for the methods listed for chemistry in A.A.C. R9-14-611, a laboratory shall demonstrate proficiency as described in subsection (A) by participating, every 12 months, in a water supply proficiency evaluation audit as required by the EPA under the Safe Drinking Water Act, 42 U.S.C. §§ 300f to 300j-26.~~

~~2. To maintain a license for the methods listed for chemistry in A.A.C. R9-14-612 and R9-14-613, a laboratory shall demonstrate proficiency as described in subsection (A) by participating, every 12 months, in a water pollution proficiency evaluation audit as required by the EPA under the Clean Water Act, 33 U.S.C. §§ 1251-1387.~~

F. A licensee or applicant shall ensure that:

1. Each proficiency testing sample accepted at the licensee's or applicant's laboratory is analyzed at the licensee's or applicant's laboratory;

~~B.~~ 2. ~~A laboratory analyst shall test each~~ Each proficiency ~~evaluation~~ testing sample is tested within the holding times required for its parameter, ~~and shall use~~ using the same procedures and techniques employed for routine sample testing, ~~.~~ and calculating the holding time from the time the sample seal is broken or as indicated in the instructions

accompanying the sample;

~~C.~~ 3. ~~The~~ A proficiency ~~evaluation~~ testing service ~~shall provide the~~ provides proficiency ~~evaluation~~ testing results directly to the Department.;

4. If proficiency testing is provided by the Department, the licensee or applicant submits to the Department payment for the actual costs of the proficiency testing materials; and

5. If proficiency testing is not provided by the Department or the EPA, the licensee or applicant selects a proficiency testing service from a list provided by the Department and contracts with and pays the proficiency testing service directly for proficiency testing.

~~D.~~**G.** The Department may submit blind proficiency ~~evaluation audit~~ testing samples to a licensed laboratory at any time during the license period.

~~E. If a proficiency evaluation audit is provided by the Principal State Laboratory System, a licensee or an applicant shall submit to the Department payment for the actual costs of the proficiency evaluation audit materials.~~

~~F. If a proficiency evaluation audit is not provided by the Principal State Laboratory System, a licensee or an applicant shall select a proficiency evaluation service from a list provided by the Department. A licensee or an applicant shall contract with and pay the proficiency evaluation service directly for a proficiency evaluation audit.~~

R9-14-610. Approved Methods and References

A. A licensee or applicant shall ensure that compliance testing is performed according to an approved method ~~or an alternate method~~ and may use method alterations approved by the Director under subsection ~~(B)~~ (C).

B. The approved methods listed by parameter in ~~R9-14-611 through R9-14-614~~ Exhibit I are found in the following references, which are incorporated by reference with the modifications described below; ~~and~~ are on file with the Department ~~and the Office of the Secretary of State. This incorporation by reference contains~~; include no future editions or amendments; and are available as provided below. ~~The references published by the EPA, the U.S. Department of Energy, the U.S. Department of Health and Human Services, and the U.S. Department of the Interior are available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161. The other references are available as provided below.~~

Key Reference

A Environmental Monitoring and Support Laboratory–Cincinnati, EPA, Pub. No. EPA-600/4-79-020, Methods for Chemical Analysis of Water and Wastes (rev. March 1983), available at http://nepis.epa.gov/pubtitleord.htm.

A1 Environmental Monitoring and Support Laboratory–Cincinnati, EPA, Pub. No. EPA/600/R-94/111, Methods for the Determination of Metals in Environmental Samples: Supplement I (May 1994), available at http://nepis.epa.gov/pubtitleord.htm.

A2 Environmental Monitoring Systems Laboratory, EPA, Pub. No. EPA/600/R-93/100, Methods for the Determination of Inorganic Substances in Environmental Samples (August 1993), available at http://nepis.epa.gov/pubtitleord.htm, modified to increase the maximum holding time from 48 hours to 14 days at 4° C for chlorinated, unacidified drinking water samples collected for determination of nitrate.

A3 Technicon Industrial Systems, Industrial Method No. 380-75WE, Fluoride in Water and Wastewater (July 1977), available from Bran & Luebbe Analyzing Inc., 1025 Busch Parkway, Buffalo Grove, IL 60089.

A4 Office of Water, EPA, Pub. No. ~~EPA-821-R-99-005~~ EPA-821-R-02-019, Method 1631, Revision ~~B~~ E: Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Atomic Fluorescence Spectrometry (~~May 1999~~ August 2002), available at http://www.epa.gov/waterscience/methods/1631.html.

A5 Technicon Industrial Systems, Industrial Method No. 129-71W, Fluoride in Water and Wastewater (December 1972), available from Bran & Luebbe Analyzing Inc., 1025 Busch Parkway, Buffalo Grove, IL 60089.

A6 Herbert P. Wagner et al., EPA, Pub. No. EPA 815-B-01-001, Method 317.0: Determination of Inorganic Oxyhalide Disinfection By-Products in Drinking Water Using Ion Chromatography with the Addition of a Postcolumn Reagent for Trace Bromate Analysis (rev. 2.0 July 2001), available at www.epa.gov/safewater/methods/sourcalt.html.

A7 Herbert P. Wagner et al., EPA, Pub. No. EPA 815-R-05-007, Method 326.0: Determination of Inorganic Oxyhalide Disinfection By-Products in Drinking Water Using Ion Chromatography Incorporating the Addition of a Suppressor Acidified Postcolumn Reagent for Trace Bromate Analysis (rev. 1.0 June 2002), available at www.epa.gov/safewater/methods/sourcalt.html.

A8 Teri A. Dattilio et al., EPA, Pub. No. EPA 815-R-05-008, Method 327.0: Determination of Chlorine Dioxide and Chlorite Ion in Drinking Water Using Lissamine Green B and Horseradish Peroxidase with Detection by Visible Spectrophotometry (rev. 1.1 May 2005), available at www.epa.gov/safewater/methods/sourcalt.html.

A9 B.B. Potter and J.C. Wimsatt, EPA, Pub. No. EPA/600/R-05/055, Method 415.3: Determination of Total Organic Carbon and Specific UV Absorbance at 254 nm in Source and Drinking Water (rev. 1.1 February 2005), available at www.epa.gov/nerlcwww/ordmeth.htm.

B Herman L. Krieger, EPA, Pub. No. EPA-600/4-75-008, Interim Radiochemical Methodology for Drinking Water (March 1976), available from National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

C American Public Health Association et al., Standard Methods for the Examination of Water and Wastewater (19th ed.

1995), available from American Public Health Association, ~~1015 15th~~ 800 I Street, NW, Washington, DC ~~20005~~ 20001.

C1 Hach Company, Hach Water Analysis Handbook (3rd ed. 1997), available from Hach Company, P.O. Box 389, Loveland, CO 80539-0389.

C2 American Public Health Association et al., Standard Methods for the Examination of Water and Wastewater (20th ed. 1998), available from American Public Health Association, 800 I Street, NW, Washington, DC 20001, modified to require:

a. For drinking water TOC testing:
   i. That inorganic carbon be removed from each TOC sample before analysis,
   ii. That each TOC sample not be filtered before analysis,
   iii. That the pH of each TOC sample be checked and documented before analysis and that the test result be qualified in the final report if the sample pH was >2, and
   iv. That each acidified TOC sample be analyzed within 28 days; and

b. For drinking water DOC testing:
   i. That each DOC sample be filtered through a 0.45 um pore-diameter filter as soon as practical and no later than 48 hours after sampling,
   ii. That each DOC sample be acidified after filtration to achieve a pH ≤2 with minimal addition of the acid specified in the method or by the instrument manufacturer,
   iii. That each acidified DOC sample be analyzed within 28 days after sample collection,
   iv. That inorganic carbon be removed from each DOC sample before analysis,
   v. That water passed through the filter before filtration of the DOC sample serve as the filtered blank, and
   vi. That the filtered blank be analyzed using procedures identical to those used for analysis of the DOC sample and have DOC < 0.5 mg/L;

c. For drinking water testing of UV-absorbing organic constituents:
   i. That UV absorption be measured at 253.7 nm or 254 nm,
   ii. That each UV sample be filtered through a 0.45 um pore-diameter filter before analysis,
   iii. That the pH of UV samples not be adjusted, and
   iv. That each UV sample be analyzed as soon as practical and no later than 48 hours after sampling; and

d. For drinking water disinfection byproducts testing by micro liquid-liquid extraction/GC-ECD using method 6251B, that each sample be extracted within 14 days after sample collection.

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D9 Ed K. Price et al., EPA, Pub. No. 815-R-05-005, Method 527: Determination of Selected Pesticides and Flame Retardants in Drinking Water by Solid Phase Extraction and Capillary Column Gas Chromatography/Mass Spectrometry (GC/MS) (rev. 1.0 April 2005), available at http://www.epa.gov/safewater/methods/sourcalt.html.

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Z13 EPA, Pub. No. EPA-821-R-02-012, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (5th ed. October 2002), available at www.epa.gov/waterscience/WET/disk2/.

~~B.~~C. If an approved method ~~or existing alternate method~~ is not available for a particular parameter, or a different method or method alteration is required or authorized to be used for a particular parameter by the EPA, ADEQ, the U.S. Food and Drug Administration, or 9 A.A.C. 8, a licensee may ~~petition the Department for~~ request approval of ~~a new~~ an alternate method or method alteration.

1. For ~~a~~ an alternate method or method alteration required or authorized by the EPA, ADEQ, the U.S. Food and Drug Administration, or 9 A.A.C. 8, the ~~petition~~ request shall include:
   a. The name, address, and telephone number of the licensee submitting the ~~petition~~ request;
   b. The name, address, and telephone number of the laboratory for which approval of the alternate method or method alteration is requested;
   c. Identification of the parameter for which approval of the alternate method or method alteration is requested; ~~and~~
   d. Reference to the EPA, ADEQ, U.S. Food and Drug Administration, or 9 A.A.C. 8 requirement or authorization for the use of the alternate method or method alteration for which approval is requested; and
   e. An alternate method or method alteration approval fee of $50 payable to the Arizona Department of Health Services in the form of a certified check, business check, money order, or credit card payment.
2. For ~~a~~ an alternate method or method alteration that is not required or authorized by the EPA, ADEQ, the U.S. Food and Drug Administration, or 9 A.A.C. 8, the ~~petition~~ request shall include:
   a. The name, address, and telephone number of the licensee submitting the ~~petition~~ request;
   b. The name, address, and telephone number of the laboratory for which approval of the alternate method or method alteration is requested;
   c. Identification of the parameter for which approval of the alternate method or method alteration is requested; and
   d. Written justification for using the alternate method or method alteration for which approval is requested, including the following:
      i. A detailed description of the alternate method or method alteration;
      ii. References to published or other studies confirming the general applicability of the alternate method or method alteration to the parameter for which its use is intended;
      iii. Reference to the EPA, ADEQ, U.S. Food and Drug Administration, or 9 A.A.C. 8 requirement to test the parameter; and
      iv. Data that demonstrate the performance of the alternate method or method alteration in terms of accuracy, precision, reliability, ruggedness, ease of use, and ability to achieve a detection limit appropriate for the proposed use of the alternate method or method alteration; and
   e. An alternate method or method alteration approval fee of $50 payable to the Arizona Department of Health Services in the form of a certified check, business check, money order, or credit card payment.
3. Before approving ~~a new~~ an alternate method or method alteration that is not required or authorized by the EPA, ADEQ, the U.S. Food and Drug Administration, or 9 A.A.C. 8, the Department may require that the alternate method or method alteration be performed ~~by~~ at a laboratory designated by the Department to verify that, using the parameter for which its use is intended, the alternate method or method alteration produces data that comply with subsection (~~B~~C)(2)(d)(iv).
4. The Department may approve ~~a new~~ an alternate method or method alteration ~~that is not required or authorized by the EPA, ADEQ, the U.S. Food and Drug Administration, or 9 A.A.C. 8~~ if the Department determines ~~that~~:
   a. One of the following:
      i. Use of the alternate method or method alteration is required or authorized by the EPA, ADEQ, the U.S. Food and Drug Administration, or 9 A.A.C. 8; or
      ii. ~~use~~ Use of the alternate method or method alteration is justified as described in subsection (~~B~~C)(2)(d); and
   b. If the alternate method or method alteration pertains to drinking water compliance testing, the EPA concurs that the alternate method or method alteration may be used.

R9-14-611. Drinking Water ~~Sample Methods~~ Compliance Testing

~~A. A laboratory that conducts compliance testing of drinking water shall follow the guidelines in Key Reference D4, listed in R9-14-610(A), excluding requirements for laboratory personnel education and experience. In addition, when conducting compliance testing of a drinking water sample for a listed contaminant or group of contaminants, a laboratory shall use at least one of the corresponding methods listed below, unless the laboratory uses an alternate method approved by the Department for such testing under R9-14-610(B). Where two methods listed are joined by the word "and," a laboratory shall use both methods listed. To locate the source of each method listed, cross reference the capital letter listed under the~~

~~term "Key" below to the corresponding key-reference list in R9-14-610(A).~~

A licensee for a laboratory that conducts drinking water compliance testing shall ensure that:

1. The laboratory is operated in compliance with the guidelines in Key Reference D4, excluding the requirements for laboratory personnel education and experience;
2. Each drinking water sample for Arizona compliance testing is analyzed using an approved method:
   a. Listed under Exhibit I, Section A, Drinking Water Parameters; or
   b. Approved for drinking water compliance testing under R9-14-610(C); and
3. If the licensee desires to be licensed to perform testing for vinyl chloride, the licensee also obtains licensure to perform testing for each of the analytes listed in 40 CFR 141.61(a)(2)-(21).

~~**B.**~~	~~Microbiology:~~	~~Key~~	~~Method~~
~~1.~~	~~Total Coliforms:~~		
~~a.~~	~~Multiple Tube~~	~~C~~	~~9221B and C~~
		~~C1~~	~~8001~~
~~b.~~	~~Membrane Filter~~	~~C~~	~~9222B, C~~
~~c.~~	~~Colilert~~	~~C~~	~~9223B~~
~~d.~~	~~Colisure~~	~~T~~	~~Broadway et al.~~
~~e.~~	~~Presence - Absence~~	~~C~~	~~9221D~~
~~2.~~	~~Heterotrophic Plate Count~~	~~C~~	~~9215B~~
~~3.~~	~~Escherichia coli~~	~~X~~	~~Tube Procedure~~ ~~Membrane Filter Procedure~~
~~4.~~	~~Fecal coliform~~	~~C~~	~~9221E, 9222D~~
		~~C1~~	~~8001~~
~~5.~~	~~Viruses~~	~~P2~~	~~600/R-95/178~~
~~6.~~	~~Giardia and Cryptosporidium~~	~~P2~~	~~600/R-95/178~~
~~**C.**~~	~~Sample preparation for metals:~~	~~Key~~	~~Method~~
~~1.~~	~~Preliminary Filtration~~	~~C~~	~~3030B~~
~~2.~~	~~Acid Extractable Metals~~	~~C~~	~~3030C~~
~~3.~~	~~Acid Digestion:~~		
~~a.~~	~~Nitric Acid~~	~~C~~	~~3030E~~
~~b.~~	~~Nitric Acid/Hydrochloric Acid~~	~~C~~	~~3030F~~
~~c.~~	~~Nitric Acid/Sulfuric Acid~~	~~C~~	~~3030G~~
~~d.~~	~~Nitric Acid/Perchloric Acid~~	~~C~~	~~3030H~~
~~e.~~	~~Nitric Acid/Perchloric Acid/Hydrofluoric Acid~~	~~C~~	~~3030I~~
~~4.~~	~~Microwave Assisted Digestion~~	~~C~~	~~3030K~~
~~**D.**~~	~~Inorganic chemical and physical characteristics:~~	~~Key~~	~~Method~~
~~1.~~	~~Alkalinity~~	~~C~~	~~2320B~~
		~~I~~	~~D1067-92B~~
		~~J~~	~~I-1030-85~~
~~2.~~	~~Aluminum~~	~~A1~~	~~200.7, 200.8, 200.9~~
		~~C~~	~~3111D, 3113B, 3120B~~

		~~J~~	~~I-3051-85~~
~~3.~~	~~Antimony~~	~~A1~~	~~200.8, 200.9~~
		~~C~~	~~3113B~~
		~~I~~	~~D3697-92~~
~~4.~~	~~Arsenic~~	~~A1~~	~~200.7, 200.8, 200.9~~
		~~C~~	~~3113B, 3114B, 3120B~~
		~~I~~	~~D2972-93B, C~~
~~5.~~	~~Asbestos~~	~~H1~~	~~100.1~~
		~~H2~~	~~100.2~~
~~6.~~	~~Barium~~	~~A1~~	~~200.7, 200.8~~
		~~C~~	~~3111D, 3113B, 3120B~~
~~7.~~	~~Beryllium~~	~~A1~~	~~200.7, 200.8, 200.9~~
		~~C~~	~~3113B, 3120B~~
		~~I~~	~~D3645-93B~~
~~8.~~	~~Bromate~~	~~A2~~	~~300.1~~
~~9.~~	~~Bromide~~	~~A2~~	~~300.0, 300.1~~
~~10.~~	~~Cadmium~~	~~A1~~	~~200.7, 200.8, 200.9~~
		~~C~~	~~3113B~~
~~11.~~	~~Calcium~~	~~A1~~	~~200.7~~
		~~C~~	~~3111B, 3120B, 3500-Ca D~~
		~~I~~	~~D511-93 A, B~~
~~12.~~	~~Chloride~~	~~A2~~	~~300.0~~
		~~C~~	~~4110B, 4500-Cl D~~
		~~I~~	~~D4327-91~~
~~13.~~	~~Chlorine~~	~~C~~	~~4500-Cl D, E, F, G, H, I~~
		~~C1~~	~~8021, 8167, 8168, 8370~~
~~14.~~	~~Chlorine Dioxide~~	~~C~~	~~4500-ClO2 C, D, E~~
~~15.~~	~~Chlorite~~	~~A2~~	~~300.0, 300.1~~
~~16.~~	~~Chromium, Total~~	~~A1~~	~~200.7, 200.8, 200.9~~
		~~C~~	~~3113B, 3120B~~
~~17.~~	~~Color~~	~~C~~	~~2120 B~~
~~18.~~	~~Copper~~	~~A1~~	~~200.7, 200.8, 200.9~~
		~~C~~	~~3111B, 3113B, 3120B~~
		~~I~~	~~D1688-90A, C~~
~~19.~~	~~Corrosivity~~	~~C~~	~~2330B~~
~~20.~~	~~Cyanide~~	~~A2~~	~~335.4~~
		~~C~~	~~4500-CN C, E, F, G~~
		~~I~~	~~D2036-91A, B~~
		~~J~~	~~I-3300-85~~
~~21.~~	~~Cyanide, Amenable~~	~~C~~	~~4500-CN G~~
		~~I~~	~~D2036-91B~~
~~22.~~	~~Fluoride~~	~~A2~~	~~300.0~~
		~~A3~~	~~380-75WE~~

		~~C~~	~~4110B, 4500-F B, C, D, E~~
		~~C1~~	~~8029~~
		~~I~~	~~D1179-93B, D4327-91~~
~~23.~~	~~Hardness~~	~~A1~~	~~Sum of Ca and Mg by 200.7 as their carbonates~~
		~~C~~	~~2340B, C, Sum of Ca and Mg as their carbonates~~
~~24.~~	~~Iron~~	~~A1~~	~~200.7, 200.9~~
		~~C~~	~~3111B, 3113B, 3120B~~
~~25.~~	~~Lead~~	~~A1~~	~~200.8, 200.9~~
		~~C~~	~~3113B~~
		~~I~~	~~D3559-90D~~
~~26.~~	~~Magnesium~~	~~A1~~	~~200.7, 200.8, 200.9~~
		~~C~~	~~3111B, 3120B~~
~~27.~~	~~Manganese~~	~~A1~~	~~200.7, 200.8, 200.9~~
		~~C~~	~~3111B, 3113B, 3120B~~
~~28.~~	~~Methylene Blue Active Substances~~	~~C~~	~~5540C~~
~~29.~~	~~Mercury~~	~~A~~	~~245.2~~
		~~A1~~	~~200.8, 245.1~~
		~~C~~	~~3112B~~
		~~I~~	~~D3223-91~~
~~30.~~	~~Nickel~~	~~A1~~	~~200.7, 200.8, 200.9~~
		~~C~~	~~3111B, 3113B, 3120B~~
~~31.~~	~~Nitrate~~	~~A2~~	~~300.0, 353.2~~
		~~C~~	~~4110B, 4500-NO3 D, E, F~~
		~~I~~	~~D3867-90A, B, D4327-91~~
~~32.~~	~~Nitrite~~	~~A2~~	~~300.0, 353.2~~
		~~C~~	~~4110B, 4500-NO2 B, E, F~~
		~~I~~	~~D3867-90A, B, D4327-91~~
~~33.~~	~~Ortho-Phosphate~~	~~A2~~	~~300.0, 365.1~~
		~~I~~	~~D515-88A, D4327-91~~
		~~C~~	~~4110, 4500-P E, F~~
		~~J~~	~~I-1601-85, I-2598-85, I-2601-90~~
~~34.~~	~~Ozone~~	~~C~~	~~4500-O3 B~~
~~35.~~	~~pH (Hydrogen Ion)~~	~~A~~	~~150.1, 150.2~~
		~~C~~	~~4500-H B~~
		~~C1~~	~~8156~~
		~~I~~	~~D1293-84~~
~~36.~~	~~Residue, Filterable~~	~~C~~	~~2540C~~

~~37.~~	~~Selenium~~	~~A1~~	~~200.8, 200.9~~
		~~C~~	~~3113B, 3114B~~
		~~I~~	~~D3859-93A, B~~
~~38.~~	~~Silica~~	~~A1~~	~~200.7~~
		~~C~~	~~4500-Si D, E, F, 3120B~~
		~~I~~	~~D859-88~~
		~~J~~	~~I-2700-85~~
~~39.~~	~~Silver~~	~~A1~~	~~200.7, 200.8, 200.9~~
		~~C~~	~~3111B, 3113B, 3120B~~
		~~J~~	~~I-3720-85~~
~~40.~~	~~Sodium~~	~~A1~~	~~200.7~~
		~~C~~	~~3111B~~
~~41.~~	~~Specific Conductance~~	~~C~~	~~2510B~~
		~~C1~~	~~8160~~
		~~I~~	~~D1125-91A~~
~~42.~~	~~Strontium~~	~~A1~~	~~200.7~~
		~~C~~	~~3500-Sr B, C, D~~
~~43.~~	~~Sulfate~~	~~A2~~	~~300.0, 375.2~~
		~~C~~	~~4110B, 4500-SO4 C, D, F~~
		~~I~~	~~D4327-91~~
~~44.~~	~~Temperature, Degrees Celsius~~	~~C~~	~~2550B~~
~~45.~~	~~Thallium~~	~~A1~~	~~200.8, 200.9~~
~~46.~~	~~Total Organic Carbon~~	~~C~~	~~5310B, C, D~~
~~47.~~	~~Turbidity: Nephelometric~~	~~A2~~	~~180.1~~
		~~C~~	~~2130B~~
~~48.~~	~~Ultraviolet Absorbing Organic Constituents~~	~~C~~	~~5910B~~
~~49.~~	~~Zinc~~	~~A1~~	~~200.7, 200.8~~
		~~C~~	~~3111B, 3120B~~
~~E.~~	~~Organic chemicals:~~	~~Key~~	~~Method~~
~~1.~~	~~Total Trihalomethanes~~	~~D3~~	~~502.2, 524.2, 551.1~~
~~2.~~	~~Volatile Organics~~	~~D3~~	~~502.2, 524.2~~
~~3.~~	~~Chlorinated Pesticides~~	~~D3~~	~~505, 508, 508.1, 525.2~~
~~4.~~	~~Polychlorinated Biphenyls~~	~~D~~	~~508A~~
		~~D3~~	~~505, 508~~
~~5.~~	~~Chlorophenoxy Herbicides~~	~~D~~	~~515.1~~
		~~D2~~	~~552.1, 555~~
		~~D3~~	~~515.2~~
~~6.~~	~~1,2-Dibromoethane and 1,2-Dibromo-3-Chloropropane~~	~~D3~~	~~504.1, 551.1~~
~~7.~~	~~Nitrogen and Phosphorus Pesticides~~	~~D3~~	~~507, 508.1, 525.2~~

~~8.~~	~~Base/Neutrals and Acids~~	~~D3~~	~~525.2~~
~~9.~~	~~Carbamates~~	~~D3~~	~~531.1~~
~~10.~~	~~Dioxins and Furans~~	~~E~~	~~1613~~
~~11.~~	~~Glyphosate~~	~~D1~~	~~547~~
~~12.~~	~~Endothall~~	~~D2~~	~~548.1~~
~~13.~~	~~Diquat and Paraquat~~	~~D5~~	~~549.2~~
~~14.~~	~~Polycyclic Aromatic Hydrocarbons~~	~~D1~~	~~550, 550.1~~
		~~D3~~	~~525.2~~
~~15.~~	~~Disinfectant By-products and Chlorinated Solvents~~	~~D3~~	~~551.1~~
~~16.~~	~~Haloacetic Acids~~	~~C~~	~~6251B~~
		~~D2~~	~~552.1~~
		~~D3~~	~~551.1, 552.2~~
~~17.~~	~~Phthalate Esters and Adipates~~	~~D3~~	~~506, 525.2~~
~~18.~~	~~Benzidines and Nitrogen Pesticides~~	~~D2~~	~~553~~
~~19.~~	~~Carbonyl Compounds~~	~~D2~~	~~554~~
~~20.~~	~~Chlorinated Acids~~	~~D2~~	~~555~~
		~~D6~~	~~515.3~~
~~F.~~	~~Radiochemical:~~	~~Key~~	~~Method~~
~~1.~~	~~Gross Alpha~~	~~B~~	~~Gross Alpha~~
		~~C~~	~~7110B, 7110C~~
		~~J1~~	~~R-1120-76~~
		~~L~~	~~900~~
		~~V~~	~~00-01, 00-02~~
		~~W~~	~~Gross Alpha~~
~~2.~~	~~Gross Beta~~	~~B~~	~~Gross Beta~~
		~~C~~	~~7110B~~
		~~J1~~	~~R-1120-76~~
		~~L~~	~~900~~
		~~V~~	~~00-01~~
		~~W~~	~~Gross Beta~~
~~3.~~	~~Radium-226~~	~~B~~	~~Radon Emanation, Precipitation Method~~
		~~C~~	~~7500-Ra B, 7500-Ra C~~
		~~I~~	~~D2460-90, D3454-91~~
		~~J1~~	~~R-1140-76, R-1141-76~~
		~~L~~	~~903, 903.1~~
		~~U~~	~~Ra-05~~
		~~V~~	~~Ra-03, Ra-04~~
		~~W~~	~~Radium 226~~
~~4.~~	~~Radium-228~~	~~B~~	~~Radium 228~~
		~~C~~	~~7500-Ra D~~
		~~J1~~	~~R-1142-76~~

		~~L~~	~~904~~
		~~V~~	~~Ra-05~~
		~~W~~	~~Radium 228~~
		~~X1~~	~~Radium 228~~
~~5.~~	~~Cesium~~	~~B~~	~~Cesium-134~~
		~~C~~	~~7500-Cs B, 7120~~
		~~J1~~	~~R-1110-76, R-1111-76~~
		~~L~~	~~901, 901.1~~
		~~U~~	~~4.5.2.3~~
		~~W~~	~~Gamma Spectra~~
~~6.~~	~~Iodine~~	~~B~~	~~Precipitation Method, Distillation Method~~
		~~C~~	~~7500-I B, C, D, 7120~~
		~~I~~	~~D3649-91, D4785-93~~
		~~L~~	~~901.1, 902~~
		~~U~~	~~4.5.2.3~~
		~~W~~	~~Gamma Spectra~~
~~7.~~	~~Strontium~~	~~B~~	~~Strontium~~
		~~C~~	~~7500-Sr B~~
		~~J1~~	~~R-1160-76~~
		~~L~~	~~905~~
		~~U~~	~~Sr-01, Sr-02~~
		~~V~~	~~Sr-04~~
		~~W~~	~~Strontium~~
~~8.~~	~~Tritium~~	~~B~~	~~Tritium~~
		~~C~~	~~7500-H B~~
		~~I~~	~~D4107-91~~
		~~J1~~	~~R-1171-76~~
		~~L~~	~~906~~
		~~V~~	~~H-02~~
		~~W~~	~~Tritium~~
~~9.~~	~~Uranium~~	~~C~~	~~7500-U B, C~~
		~~I~~	~~D2907-91, D3972-90, D5174-91~~
		~~J1~~	~~R-1180-76, R-1181-76, R-1182-76~~
		~~L~~	~~908, 908.1~~
		~~U~~	~~U-02, U-04~~
		~~V~~	~~00-07~~
		~~W~~	~~Uranium~~
~~10.~~	~~Gamma Emitting Isotopes~~	~~C~~	~~7120, 7500-Cs B, 7500-I B~~
		~~L~~	~~901, 901.1, 902~~
		~~W~~	~~Gamma Spectra~~
~~G.~~	~~Biological:~~	~~Key~~	~~Method~~
	~~Microscopic Particulate Analysis~~	~~P1~~	~~910/9-92-029~~

R9-14-612. Wastewater ~~Sample Methods~~ Compliance Testing

~~A. When conducting compliance testing of a wastewater sample for a listed contaminant or group of contaminants, a laboratory shall use at least one of the corresponding methods listed below, unless the laboratory uses an alternate method approved by the Department for such testing under A.A.C. R9-14-610(B). Where two methods listed are joined by the word "and," a laboratory shall use both methods listed. To locate the source of each method listed, cross reference the capital letter listed under the term "Key" below to the corresponding key reference list in A.A.C. R9-14-610(A).~~ A licensee for a laboratory that conducts wastewater compliance testing shall ensure that each wastewater sample for Arizona compliance testing is analyzed using an approved method:

1. Listed under Exhibit I, Section B, Wastewater Parameters; or
2. Approved for wastewater compliance testing under R9-14-610(C).

~~B.~~	~~Microbiology:~~	~~Key~~	~~Method~~
~~1.~~	~~Fecal Coliforms:~~		
~~a.~~	~~Multiple Tube Fermentation~~	~~C~~	~~9221E~~
~~b.~~	~~Membrane Filter~~	~~C~~	~~9222D~~
		~~J~~	~~B-0050-85~~
~~2.~~	~~Total Coliforms:~~		
~~a.~~	~~Multiple Tube Fermentation~~	~~C~~	~~9221B~~
~~b.~~	~~Membrane Filter~~	~~C~~	~~9222B~~
		~~J~~	~~B-0025-77~~
~~3.~~	~~Fecal Streptococcus:~~		
~~a.~~	~~Multiple Tube Fermentation~~	~~C~~	~~9230B~~
~~b.~~	~~Membrane Filter~~	~~C~~	~~9230C~~
		~~J~~	~~B-0055-85~~
~~4.~~	~~Viruses~~	~~C~~	~~9510~~
		~~P~~	~~Methods for Virology~~
		~~P2~~	~~600/R-95/178~~
~~5.~~	~~Giardia and Cryptosporidium~~	~~C~~	~~9711B~~
		~~P2~~	~~600/R-95/178~~
~~6.~~	~~Ascaris lumbricoides~~	~~C~~	~~10550~~
		~~P3~~	~~UofA2000~~
~~7.~~	~~Common tapeworm~~	~~C~~	~~10550~~
~~8.~~	~~Entamoeba histolytica~~	~~C~~	~~10550~~
~~C.~~	~~Inorganic chemicals, nutrients and demand:~~	~~Key~~	~~Method~~
~~1.~~	~~Acidity~~	~~A~~	~~305.1~~
		~~C~~	~~2310B~~
		~~C1~~	~~8010~~
		~~I~~	~~D1067-92~~
~~2.~~	~~Alkalinity, Total~~	~~A~~	~~310.1, 310.2~~
		~~C~~	~~2320B~~
		~~I~~	~~D1067-92~~
		~~J~~	~~I-1030-85, I-2030-85~~
~~3.~~	~~Aluminum~~	~~A~~	~~202.1, 202.2~~

		~~A1~~	~~200.7, 200.8, 200.9~~
		~~C~~	~~3111D, 3113B, 3120B~~
		~~I~~	~~I-3051-85~~
~~4.~~	~~Ammonia~~	~~A~~	~~350.2, 350.3~~
		~~A2~~	~~350.1~~
		~~C~~	~~4500-NH3 B, C, D, E, F, G~~
		~~C1~~	~~8038~~
		~~I~~	~~D1426-93A, B~~
		~~J~~	~~I-3520-85, I-4523-85~~
~~5.~~	~~Antimony~~	~~A~~	~~204.1, 204.2~~
		~~A1~~	~~200.7, 200.8, 200.9~~
		~~C~~	~~3111B, 3113B, 3120B~~
~~6.~~	~~Arsenic~~	~~A~~	~~206.2, 206.3, 206.4, 206.5~~
		~~A1~~	~~200.7, 200.8, 200.9~~
		~~C~~	~~3113B, 3120B, 3500-As B, C~~
		~~C1~~	~~8013~~
		~~I~~	~~D2972-93A, B, C~~
		~~J~~	~~I-3060-85, I-3062-85~~
~~7.~~	~~Barium~~	~~A~~	~~208.1, 208.2~~
		~~A1~~	~~200.7, 200.8~~
		~~C~~	~~3111D, 3113B, 3120B~~
		~~I~~	~~D4382-91~~
		~~J~~	~~I-3084-85~~
~~8.~~	~~Beryllium~~	~~A~~	~~210.1, 210.2~~
		~~A1~~	~~200.7, 200.8, 200.9~~
		~~C~~	~~3111D, 3113B, 3120B, 3500-Be D~~
		~~I~~	~~D3645-94(88)A, B, D4190-82(88)~~
		~~J~~	~~I-3095-85~~
~~9.~~	~~Biochemical Oxygen Demand~~	~~A~~	~~405.1~~
		~~C~~	~~5210B~~
		~~C1~~	~~8043~~
		~~J~~	~~I-1578-78~~
~~10.~~	~~Boron~~	~~A~~	~~212.3~~
		~~A1~~	~~200.7~~

		~~C~~	~~3120B, 4500-B B~~
		~~I~~	~~I-3112-85~~
~~11.~~	~~Bromide~~	~~A~~	~~320.1~~
		~~A2~~	~~300.0~~
		~~I~~	~~D1246-82(88)C~~
		~~J~~	~~I-1125-85~~
~~12.~~	~~Cadmium~~	~~A~~	~~213.1, 213.2~~
		~~A1~~	~~200.7, 200.8, 200.9~~
		~~C~~	~~3111B, C, 3113B, 3120B, 3500-Cd D~~
		~~I~~	~~D3557-90A, B, C, D, D4190-82(88)~~
		~~J~~	~~I-3135-85, I-3136-85, I-1472-85~~
~~13.~~	~~Calcium~~	~~A~~	~~215.1, 215.2~~
		~~A1~~	~~200.7~~
		~~C~~	~~3111B, 3120B, 3500-Ca D~~
		~~C1~~	~~8222~~
		~~I~~	~~D511-93A, B~~
		~~J~~	~~I-3152-85~~
~~14.~~	~~Chemical Oxygen Demand~~	~~A~~	~~410.1, 410.2, 410.3~~
		~~A2~~	~~410.4~~
		~~C~~	~~5220C, D~~
		~~C1~~	~~8000, 8230~~
		~~I~~	~~D-1252-88A, B~~
		~~J~~	~~I-3560-85, I-3561-85, I-3562-85~~
~~15.~~	~~Chloride~~	~~A~~	~~325.1, 325.2, 325.3~~
		~~A2~~	~~300.0~~
		~~C~~	~~4500-Cl B, C, E~~
		~~C1~~	~~8225~~
		~~I~~	~~D512-89A, B~~
		~~J~~	~~I-1183-85, I-1184-85, I-1187-85, I-2187-85~~
~~16.~~	~~Chlorine, Total Residual~~	~~A~~	~~330.1, 330.2, 330.3, 330.4, 330.5~~
		~~C~~	~~4500-Cl B, C, D, F, G~~
		~~C1~~	~~8167, 8168, 10014~~

		I	D1253-86(92)
17.	Chromium, Hexavalent	A	218.4
		C	3111C, 3500-Cr D
		I	D1687-92A
		J	I-1230-85, I-1232-85
18.	Chromium, Total	A	218.1, 218.2, 218.3
		A1	200.7, 200.8, 200.9
		C	3111B, C, 3113B, 3120B, 3500-Cr D
		C1	8023
		I	D4190-82(88)
		J	I-3236-85
19.	Cobalt	A	219.1, 219.2
		A1	200.7, 200.8, 200.9
		C	3111B, C, 3113B, 3120B
		I	D3558-90A, B, C, D4190-82(88)
		J	I-3239-85
20.	Color	A	110.1, 110.2, 110.3
		C	2120B, C, E
		J	I-1250-85
21.	Copper	A	220.1, 220.2
		A1	200.7, 200.8, 200.9
		C	3111B, C, 3113B, 3120B, 3500-Cu D, E
		C1	8506
		I	D1688-90A, B, C, D4190-82(88)
		J	I-3270-85, I-3271-85
22.	Cyanide, Amenable to Chlorination	A	335.1
		C	4500-CN G
		I	D2036-91B
23.	Cyanide, Available	Y	OIA-1677
24.	Cyanide, Total	A	335.2, 335.3
		C	4500-CN C, D, E
		I	D2036-91A
		J	I-3300-85

~~25.~~	~~Fluoride~~	~~A~~	~~340.1, 340.2, 340.3~~
		~~A2~~	~~300.0~~
		~~C~~	~~4500-F B, C, D, E~~
		~~C1~~	~~8029~~
		~~I~~	~~D1179-93A, B~~
		~~J~~	~~I-4327-85~~
~~26.~~	~~Gold~~	~~A~~	~~231.1, 231.2~~
		~~C~~	~~3111B~~
~~27.~~	~~Hardness~~	~~A~~	~~130.1, 130.2, Sum of Ca and Mg as their carbonates~~
		~~A1~~	~~200.7~~
		~~C~~	~~2340B, C~~
		~~C1~~	~~8226~~
		~~I~~	~~D1126-86(92)~~
		~~J~~	~~I-1338-85~~
~~28.~~	~~Iridium~~	~~A~~	~~235.1, 235.2~~
		~~C~~	~~3111B~~
~~29.~~	~~Iron~~	~~A~~	~~236.1, 236.2~~
		~~A1~~	~~200.7, 200.9~~
		~~C~~	~~3111B, C, 3113B, 3120B, 3500-Fe D~~
		~~C1~~	~~8008~~
		~~I~~	~~D1068-90 A, B, C, D, D4190-82(88)~~
		~~J~~	~~I-3381-85~~
~~30.~~	~~Kjeldahl, Total Nitrogen~~	~~A~~	~~351.1, 351.3, 351.4~~
		~~A2~~	~~351.2~~
		~~C~~	~~Combination of 4500-Norg B, C and 4500-NH3 C, D, F, G~~
		~~I~~	~~D3590-89A, B~~
		~~J~~	~~I-4551-78~~
~~31.~~	~~Lead~~	~~A~~	~~239.1, 239.2~~
		~~A1~~	~~200.7, 200.8, 200.9~~
		~~C~~	~~3111B, C, 3113B, 3120B, 3500-Pb D~~
		~~C1~~	~~8033~~
		~~I~~	~~D3559-90A, B, C, D, D4190-82(88)~~
		~~J~~	~~I-3399-85~~
~~32.~~	~~Lithium~~	~~A1~~	~~200.7~~

~~33.~~	~~Magnesium~~	~~A~~	~~242.1~~
		~~A1~~	~~200.7~~
		~~C~~	~~3111B, 3120B, 3500-Mg D~~
		~~I~~	~~D511-93B~~
		~~J~~	~~I-3447-85~~
~~34.~~	~~Manganese~~	~~A~~	~~243.1, 243.2~~
		~~A1~~	~~200.7, 200.8, 200.9~~
		~~C~~	~~3111B, 3113B, 3120B, 3500-Mn D~~
		~~C1~~	~~8034~~
		~~I~~	~~D858-90-A, B, C, D4190-82(88)~~
		~~J~~	~~I-3454-85~~
~~35.~~	~~Mercury~~	~~A~~	~~245.2~~
		~~A1~~	~~245.1~~
		~~A4~~	~~1631~~
		~~C~~	~~3112B~~
		~~I~~	~~D3223-91~~
		~~J~~	~~I-3462-85~~
~~36.~~	~~Methylene Blue Active Substances~~	~~A~~	~~425.1~~
		~~C~~	~~5540C~~
		~~I~~	~~D2330-88~~
~~37.~~	~~Molybdenum~~	~~A~~	~~246.1, 246.2~~
		~~A1~~	~~200.7, 200.8~~
		~~C~~	~~3111D, 3113B, 3120B~~
		~~J~~	~~I-3490-85~~
~~38.~~	~~Nickel~~	~~A~~	~~249.1, 249.2~~
		~~A1~~	~~200.7, 200.8, 200.9~~
		~~C~~	~~3111B, C, 3113B, 3120B, 3500-Ni D~~
		~~C1~~	~~8037~~
		~~I~~	~~D1886-90A, B, C, D4190-82(88)~~
		~~J~~	~~I-3499-85~~
~~39.~~	~~Nitrate~~	~~A~~	~~352.1, 353.1, 353.3~~
		~~A2~~	~~300.0, 353.2~~
		~~C~~	~~4500-NO3 E, F, H~~
		~~I~~	~~D3867-90A, B~~
		~~J~~	~~I-4545-85~~
~~40.~~	~~Nitrite~~	~~A~~	~~354.1~~

		~~A2~~	~~300.0~~
		~~C~~	~~4500-NO2 B~~
		~~C1~~	~~8507~~
		~~I~~	~~I-4540-85~~
~~41.~~	~~Oil and Grease and Total Petroleum Hydrocarbons~~	~~A~~	~~413.1~~
		~~C~~	~~5520B~~
		~~K1~~	~~1664~~
~~42.~~	~~Organic Carbon, Total~~	~~A~~	~~415.1~~
		~~C~~	~~5310B, C, D~~
		~~I~~	~~D2579-93A, B~~
~~43.~~	~~Orthophosphate~~	~~A~~	~~365.1, 365.2, 365.3~~
		~~A2~~	~~300.0~~
		~~C~~	~~4500-P E, F~~
		~~C1~~	~~8048~~
		~~I~~	~~D515-88A~~
		~~J~~	~~I-4601-85~~
~~44.~~	~~Osmium~~	~~A~~	~~252.1, 252.2~~
		~~C~~	~~3111D~~
~~45.~~	~~Oxygen, Dissolved~~	~~A~~	~~360.1, 360.2~~
		~~C~~	~~4500-O C, G~~
		~~C1~~	~~8229~~
		~~I~~	~~D888-92A, B~~
		~~J~~	~~I-1575-78, I-1576-78~~
~~46.~~	~~Palladium~~	~~A~~	~~253.1, 253.2~~
		~~C~~	~~3111B~~
~~47.~~	~~pH (Hydrogen Ion)~~	~~A~~	~~150.1~~
		~~C~~	~~4500-H B~~
		~~C1~~	~~8156~~
		~~I~~	~~D1293-84(90)A, B~~
		~~J~~	~~I-1586-85~~
~~48.~~	~~Phenols~~	~~A~~	~~420.1, 420.2~~
		~~C1~~	~~8047~~
~~49.~~	~~Phosphorus, Total~~	~~A~~	~~365.2, 365.3, 365.4~~
		~~A2~~	~~365.1~~
		~~C~~	~~4500-P B, E, F~~
		~~C1~~	~~8190~~
		~~I~~	~~D515-88A, B~~
		~~J~~	~~I-4600-85~~
~~50.~~	~~Platinum~~	~~A~~	~~255.1, 255.2~~
		~~C~~	~~3111B~~
~~51.~~	~~Potassium~~	~~A~~	~~258.1~~
		~~A1~~	~~200.7~~

		~~C~~	~~3111B, 3120B, 3500-K D~~
		~~J~~	~~I-3630-85~~
~~52.~~	~~Residue, Total~~	~~A~~	~~160.3~~
		~~C~~	~~2540B~~
		~~J~~	~~I-3750-85~~
~~53.~~	~~Residue, Filterable~~	~~A~~	~~160.1~~
		~~C~~	~~2540C~~
		~~J~~	~~I-1750-85~~
~~54.~~	~~Residue, Nonfilterable~~	~~A~~	~~160.2~~
		~~C~~	~~2540D~~
		~~C1~~	~~8158~~
		~~J~~	~~I-3765-85~~
~~55.~~	~~Residue, Settleable Solids~~	~~A~~	~~160.5~~
		~~C~~	~~2540F~~
~~56.~~	~~Residue, Volatile~~	~~A~~	~~160.4~~
		~~J~~	~~I-3753-85~~
~~57.~~	~~Rhodium~~	~~A~~	~~265.1, 265.2~~
		~~C~~	~~3111B~~
~~58.~~	~~Ruthenium~~	~~A~~	~~267.1, 267.2~~
		~~C~~	~~3111B~~
~~59.~~	~~Selenium~~	~~A~~	~~270.2~~
		~~A1~~	~~200.7, 200.8, 200.9~~
		~~C~~	~~3113B, 3114B, 3120B~~
		~~I~~	~~D3859-93A, B~~
		~~J~~	~~I-3667-85~~
~~60.~~	~~Silica, Dissolved~~	~~A~~	~~370.1~~
		~~A1~~	~~200.7~~
		~~C~~	~~3120B, 4500-Si D~~
		~~I~~	~~D859-88~~
		~~J~~	~~I-1700-85, I-2700-85~~
~~61.~~	~~Silver~~	~~A~~	~~272.1, 272.2~~
		~~A1~~	~~200.7, 200.8, 200.9~~
		~~C~~	~~3111B, C, 3113B, 3120B~~
		~~J~~	~~I-3720-85~~
~~62.~~	~~Sodium~~	~~A~~	~~273.1~~
		~~A1~~	~~200.7~~
		~~C~~	~~3111B, 3120B~~
		~~J~~	~~I-3735-85~~
~~63.~~	~~Sodium Azide~~	~~C~~	~~4110C~~
~~64.~~	~~Specific Conductance~~	~~A~~	~~120.1~~

		~~C~~	~~2510B~~
		~~C1~~	~~8160~~
		~~I~~	~~D1125-91A~~
		~~J~~	~~I-1780-85~~
~~65.~~	~~Strontium~~	~~A1~~	~~200.7~~
		~~C~~	~~3111, 3120B, 3500-Sr B, C, D~~
~~66.~~	~~Sulfate~~	~~A~~	~~375.1, 375.3, 375.4~~
		~~A2~~	~~300.0~~
		~~C~~	~~4500-SO4 C, D~~
		~~C1~~	~~8051~~
		~~I~~	~~D516-90~~
~~67.~~	~~Sulfide~~	~~A~~	~~376.1, 376.2~~
		~~C~~	~~4500-S D, F~~
		~~C1~~	~~8131~~
		~~J~~	~~I-3840-85~~
~~68.~~	~~Sulfite~~	~~A~~	~~377.1~~
		~~C~~	~~4500-SO3 B~~
		~~C1~~	~~8071~~
~~69.~~	~~Temperature Degrees Celsius~~	~~A~~	~~170.1~~
		~~C~~	~~2550B~~
~~70.~~	~~Thallium~~	~~A~~	~~279.1, 279.2~~
		~~A1~~	~~200.7, 200.8, 200.9~~
		~~C~~	~~3111B, 3120B~~
~~71.~~	~~Tin~~	~~A~~	~~282.1, 282.2~~
		~~A1~~	~~200.7, 200.9~~
		~~C~~	~~3111B, 3113B~~
		~~J~~	~~I-3850-78~~
~~72.~~	~~Titanium~~	~~A~~	~~283.1, 283.2~~
		~~C~~	~~3111D~~
~~73.~~	~~Turbidity~~	~~A2~~	~~180.1~~
		~~C~~	~~2130B~~
		~~I~~	~~D1889-88A~~
		~~J~~	~~I-3860-85~~
~~74.~~	~~Vanadium~~	~~A~~	~~286.1, 286.2~~
		~~A1~~	~~200.7, 200.8~~
		~~C~~	~~3111D, 3120B, 3500-V D~~
		~~I~~	~~D3373-93, D4190-82(88)~~
~~75.~~	~~Zinc~~	~~A~~	~~289.1, 289.2~~
		~~A1~~	~~200.7, 200.8, 200.9~~
		~~C~~	~~3111B, C, 3120B, 3500-Zn E, F~~

		~~C1~~	~~8009~~
		~~I~~	~~D1691-90A, B, D4190-82(88)~~
		~~J~~	~~I-3900-85~~
~~**D.**~~	~~Bioassay:~~	~~Key~~	~~Method~~
	~~Toxicity~~	~~M~~	~~600/4-90/027~~
		~~M1~~	~~600/4-90/027F~~
		~~N~~	~~600/4-89-001 and 600/4-89-001a~~
		~~N1~~	~~600/4-91/002~~
~~**E.**~~	~~Organic chemical:~~	~~Key~~	~~Method~~
~~1.~~	~~Volatile Organics~~	~~D3~~	~~524.2~~
		~~E~~	~~601, 602, 624, 1624~~
		~~K2~~	~~1666~~
~~2.~~	~~Acrolein and Acrylonitrile~~	~~E~~	~~603, 624, 1624~~
~~3.~~	~~Phenols~~	~~E~~	~~604~~
~~4.~~	~~Benzidines~~	~~E~~	~~605~~
~~5.~~	~~Phthalate Esters~~	~~E~~	~~606~~
~~6.~~	~~Nitrosamines~~	~~E~~	~~607~~
~~7.~~	~~Organochlorine Pesticides and Polychlorinated Biphenyls~~	~~E~~	~~608~~
~~8.~~	~~Nitroaromatics and Isophorone~~	~~E~~	~~609~~
~~9.~~	~~Polynuclear Aromatic Hydrocarbons~~	~~E~~	~~610~~
~~10.~~	~~Haloethers~~	~~E~~	~~611~~
~~11.~~	~~Chlorinated Hydrocarbons~~	~~E~~	~~612~~
~~12.~~	~~2, 3, 7, 8-Tetrachlorodibenzo-p-Dioxin~~	~~E~~	~~613~~
~~13.~~	~~Tetra- through Octa-Chlorinated Dioxins and Furans~~	~~E~~	~~1613~~
~~14.~~	~~Triazine Pesticides~~	~~E~~	~~619~~
~~15.~~	~~Base/Neutrals and Acids~~	~~E~~	~~610, 625, 1625~~
~~16.~~	~~Carbamates and Urea Pesticides~~	~~E~~	~~632~~
~~17.~~	~~Total Petroleum Hydrocarbons~~	~~A~~	~~418.1~~
~~18.~~	~~Ethylene Glycol in Wastewater~~	~~K~~	~~BLS-188~~
~~19.~~	~~Organophosphorus Pesticides~~	~~E1~~	~~614, 1657~~
~~**F.**~~	~~Radiochemical:~~	~~Key~~	~~Method~~
~~1.~~	~~Gross Alpha~~	~~C~~	~~7110B~~
		~~I~~	~~D1943-90~~
		~~L~~	~~900~~

~~2.~~	~~Gross Beta~~	~~C~~	~~7110B~~
		~~I~~	~~D1890-90~~
		~~L~~	~~900.0~~
~~3.~~	~~Total Radium~~	~~C~~	~~7500-Ra B~~
		~~I~~	~~D2460-90~~
		~~L~~	~~903.0~~
~~4.~~	~~Radium-226~~	~~C~~	~~7500-Ra C~~
		~~I~~	~~D3454-91~~
		~~L~~	~~903.1~~

R9-14-613. Solid~~, Liquid, and Hazardous~~ Waste ~~Sample Methods~~ Compliance Testing

A. ~~When conducting compliance testing of a solid, liquid, or hazardous waste sample for a listed contaminant or group of contaminants, a laboratory shall use at least one of the corresponding methods listed below, unless the laboratory uses an alternate method approved by the Department for such testing under A.A.C. R9-14-610(B). Where two methods listed are joined by the word "and," a laboratory shall use both methods listed. To locate the source of each method listed, cross reference the capital letter listed under the term "Key" below to the corresponding key-reference list in R9-14-610(A).~~ A licensee for a laboratory that conducts solid waste compliance testing shall ensure that each solid waste sample for Arizona compliance testing is analyzed using an approved method:

1. Listed under Exhibit I, Section C, Solid Waste Parameters; or
2. Approved by the Department for solid waste compliance testing under R9-14-610(C).

B. A licensee for a laboratory that conducts solid waste compliance testing using an 8000 series method from Key Reference F shall:

1. If the method includes specific quality control requirements, follow the specific quality control requirements in the method;
2. If the method does not include specific quality control requirements, follow all requirements in EPA, Method 8000C: Determinative Chromatographic Separations (rev. 3 March 2003), incorporated by reference, on file with the Department, including no future editions or amendments, and available at http://www.epa.gov/epaoswer/hazwaste/test/new-meth.htm; and
3. If the method does not include specific sample extraction procedures, follow the procedures in the following from Key Reference F, as applicable:
   a. Method 3500B,
   b. Method 3600C, and
   c. Method 5000.

C. A licensee for a laboratory that conducts solid waste compliance testing using a non-8000 series method from Key Reference F shall comply with the following from Key Reference F, as applicable according to the requirements of the specific method:

1. Method 4000, and
2. Method 7000A.

D. A licensee for a laboratory that conducts solid waste compliance testing using a method from Key Reference F shall comply with Chapters 1 through 8 of Key Reference F, as applicable according to the requirements of the specific method.

~~**B.**~~	~~Microbiology:~~	~~Key~~	~~Method~~
~~1.~~	~~Total Coliforms:~~		
~~a.~~	~~Multiple Tube Fermentation~~	~~F~~	~~9131~~
~~b.~~	~~Membrane Filter~~	~~F~~	~~9132~~
~~**C.**~~	~~Hazardous waste characteristics:~~	~~Key~~	~~Method~~
~~1.~~	~~Corrosivity:~~		
~~a.~~	~~pH determination~~	~~F~~	~~9040B, 9041A~~
~~b.~~	~~Corrosive to steel~~	~~F~~	~~1110~~
~~c.~~	~~Dermal~~	~~F~~	~~1120~~

~~2.~~	~~Ignitability~~	~~F~~	~~1010, 1020A, 1030~~
~~3.~~	~~Reactivity~~	~~F~~	~~Reactivity~~
~~**D.**~~	~~Sample extraction procedures:~~	~~Key~~	~~Method~~
~~1.~~	~~Extraction Procedure Toxicity~~	~~F~~	~~1310A~~
~~2.~~	~~Toxicity Characteristic Leaching Procedure~~	~~F~~	~~1311~~
~~3.~~	~~Multiple Extraction Procedure~~	~~F~~	~~1320~~
~~4.~~	~~Extraction Procedure for Oily Waste~~	~~F~~	~~1330A~~
~~5.~~	~~Synthetic Precipitation Leaching Procedure~~	~~F~~	~~1312~~
~~**E.**~~	~~Metals sample preparation:~~	~~Key~~	~~Method~~
~~1.~~	~~Dissolved in Water~~	~~F~~	~~3005A~~
~~2.~~	~~Total Recoverable in Water~~	~~F~~	~~3005A~~
~~3.~~	~~Total Metals~~	~~F~~	~~3010A, 3120A~~
~~4.~~	~~Oils, Greases, and Waxes~~	~~F~~	~~3031, 3040A~~
~~5.~~	~~Sediments, Sludges, and Soils~~	~~F~~	~~3050B~~
~~6.~~	~~Microwave Assisted Digestions~~	~~F~~	~~3015, 3051, 3052~~
~~**F.**~~	~~Inorganic chemical:~~	~~Key~~	~~Method~~
~~1.~~	~~Aluminum~~	~~F~~	~~6010B, 6020, 7020~~
~~2.~~	~~Antimony~~	~~F~~	~~6010B, 6020, 7040, 7041, 7062~~
~~3.~~	~~Arsenic~~	~~F~~	~~6010B, 6020, 7060A, 7061A, 7062, 7063~~
~~4.~~	~~Barium~~	~~F~~	~~6010B, 6020, 7080A, 7081~~
~~5.~~	~~Beryllium~~	~~F~~	~~6010B, 6020, 7090, 7091~~
~~6.~~	~~Cadmium~~	~~F~~	~~6010B, 6020, 7130, 7131A~~
~~7.~~	~~Calcium~~	~~F~~	~~6010B, 7140~~
~~8.~~	~~Chromium, Total~~	~~F~~	~~6010B, 6020, 7190, 7191~~
~~9.~~	~~Chromium, Hexavalent~~	~~F~~	~~7195, 7196A, 7197, 7198, 7199~~
~~10.~~	~~Cobalt~~	~~F~~	~~6010B, 6020, 7200, 7201~~
~~11.~~	~~Copper~~	~~F~~	~~6010B, 6020, 7210, 7211~~
~~12.~~	~~Iron~~	~~F~~	~~6010B, 7380, 7381~~
~~13.~~	~~Lead~~	~~F~~	~~6010B, 6020, 7420, 7421~~
~~14.~~	~~Lithium~~	~~F~~	~~6010B, 7430~~
~~15.~~	~~Magnesium~~	~~F~~	~~6010B, 7450~~
~~16.~~	~~Manganese~~	~~F~~	~~6010B, 6020, 7460, 7461~~

17.	Mercury	F	7470A, 7471A, 7472
18.	Molybdenum	F	6010B, 7480, 7481
19.	Nickel	F	6010B, 6020, 7520, 7521
20.	Osmium	F	6010B, 7550
21.	Potassium	F	6010B, 7610
22.	Selenium	F	6010B, 7740, 7741A, 7742
23.	Silver	F	6010B, 6020, 7760A, 7761
24.	Sodium	F	6010B, 7770
25.	Strontium	F	6010B, 7780
26.	Thallium	F	6010B, 6020, 7840, 7841
27.	Tin	F	6010B, 7870
28.	Vanadium	F	6010B, 7910, 7911
29.	Zinc	F	6010B, 6020, 7950, 7951
30.	White Phosphorus	F	7580
G.	Sample preparation and extraction:	Key	Method
1.	Preparation and Extraction	F	3500B
2.	Funnel Liquid-Liquid Extraction	F	3510C
3.	Continuous Liquid-Liquid Extraction	F	3520C
4.	Solid Phase Extraction	F	3535
5.	Soxhlet Extraction	F	3540C, 3541
6.	Pressurized Fluid Extraction	F	3545
7.	Sonication Extraction	F	3550B
8.	Supercritical Fluid Extraction	F	3560, 3561
9.	Waste Dilution	F	3580A, 3585
10.	Equilibrium Headspace	F	5021
11.	Purge and Trap	F	5030B, 5035
12.	Distillation	F	5031, 5032
13.	Sorbent Cartridges from Organic Sampling Train	F	5041A
14.	Cyanide Extraction for Solids and Oils	F	9013
15.	Bomb Preparation Method for Solid Waste	F	5050
H.	Sample cleanup:	Key	Method
1.	Cleanup	F	3600C
2.	Alumina Column	F	3610B
3.	Alumina Column - petroleum wastes	F	3611B
4.	Florisil Column	F	3620B

~~5.~~	~~Silica Gel Cleanup~~	~~F~~	~~3630C~~
~~6.~~	~~Gel Permeation Cleanup~~	~~F~~	~~3640A~~
~~7.~~	~~Acid-Base Partition~~	~~F~~	~~3650B~~
~~8.~~	~~Sulfur Cleanup~~	~~F~~	~~3660B~~
~~9.~~	~~Sulfuric Acid/Permanganate Cleanup~~	~~F~~	~~3665A~~
~~I.~~	~~Organic chemical:~~	~~Key~~	~~Method~~
~~1.~~	~~1,2-Dibromoethane and 1,2-Dibromo-3-Chloropropane~~	~~F~~	~~8011~~
~~2.~~	~~Nonhalogenated Volatile Organics~~	~~F~~	~~8015B~~
~~3.~~	~~Volatile Organics~~	~~F~~	~~8021B, 8260B~~
~~4.~~	~~Acrolein/Acrylonitrile/Acetonitrile~~	~~F~~	~~8316~~
~~5.~~	~~Acrylonitrile~~	~~F~~	~~8031~~
~~6.~~	~~Acrylamide~~	~~F~~	~~8032A~~
~~7.~~	~~Acetonitrile~~	~~F~~	~~8033~~
~~8.~~	~~Phenols~~	~~F~~	~~8041~~
~~9.~~	~~Phthalate Esters~~	~~F~~	~~8061A~~
~~10.~~	~~Nitrosamines~~	~~F~~	~~8070A, 8330~~
~~11.~~	~~Organochlorine Pesticides~~	~~F~~	~~8081A~~
~~12.~~	~~Polychlorinated Biphenyls~~	~~F~~	~~8082~~
~~13.~~	~~Polychlorinated Biphenyls in Waste Oil~~	~~F1~~	~~600/4-81-045~~
~~14.~~	~~Nitroaromatics and Cyclic Ketones~~	~~F~~	~~8091, 8330~~
~~15.~~	~~Polynuclear Aromatic Hydrocarbons~~	~~F~~	~~8100, 8310~~
~~16.~~	~~Haloethers~~	~~F~~	~~8111~~
~~17.~~	~~Chlorinated Hydrocarbons~~	~~F~~	~~8121~~
~~18.~~	~~Organophosphorus Pesticides~~	~~F~~	~~8141A~~
~~19.~~	~~Chlorinated Herbicides~~	~~F~~	~~8151A~~
~~20.~~	~~Semivolatile Organics~~	~~F~~	~~8270C, 8275A~~
~~21.~~	~~Semivolatile Organics~~	~~F~~	~~8410~~
~~22.~~	~~Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans~~	~~F~~	~~8280A, 8290~~
~~23.~~	~~Carbonyl Compounds~~	~~F~~	~~8315A~~
~~24.~~	~~N-Methylcarbamates~~	~~F~~	~~8318~~
~~25.~~	~~Nonvolatile Organics~~	~~F~~	~~8321A, 8325~~
~~26.~~	~~Tetrazine~~	~~F~~	~~8331~~
~~27.~~	~~Total Petroleum Hydrocarbons in Soil~~	~~F~~	~~8440~~
		~~K~~	~~418.1AZ~~
~~28.~~	~~C10-C32 Hydrocarbons~~	~~K~~	~~8015AZ~~

29.	Trinitrotoluene	F	4050
30.	RDX by Immunoassay	F	4051
31.	Aniline and Derivatives	F	8131
32.	Nitroglycerine	F	8332
33.	Bis(2-chloroethyl)Ether Hydrolysis Products	F	8430

J.	Organic chemical screening:	Key	Method
1.	Headspace	F	3810
2.	Purgeables after Hexadecane Extraction	F	3820
3.	Semivolatile Organics	F	8275A
4.	Immunoassay	F	4010A, 4015, 4020, 4030, 4035, 4040, 4041, 4042
5.	Polychlorinated Biphenyls	F	9078, 9079
6.	Trinitrotoluene	F	8515
K.	Miscellaneous:	Key	Method
1.	Cyanide	F	9010B, 9012A, 9213
2.	Total Organic Halides	F	9020B, 9022
3.	Purgeable Organic Halides	F	9021
4.	Extractable Organic Halides	F	9023
5.	Sulfides	F	9030B, 9031, 9215
6.	Sulfate	F	9035, 9036, 9038, 9056
7.	pH (Hydrogen ion)	F	9040B, 9041A, 9045C
8.	Specific Conductance	F	9050A
9.	Total Organic Carbon	F	9060
10.	Phenolics	F	9065, 9066, 9067
11.	Total Recoverable Oil and Grease	F	9070, 9071A
12.	Nitrate	F	9056, 9210
13.	Nitrite	F	9056
14.	Chloride	F	9056, 9057, 9212, 9250, 9251, 9253
15.	Bromide	F	9056, 9211
16.	Fluoride	F	9056, 9214
17.	Total Chlorine in New and Used Petroleum Products	F	9075, 9076, 9077
18.	Cation-Exchange Capacity of Soils	F	9080, 9081
19.	Compatibility Test for Wastes and Membrane Liners	F	9090A
20.	Paint Filter Liquids Test	F	9095A

~~21.~~	~~Liquid Release Test Procedure~~	~~F~~	~~9096~~
~~22.~~	~~Saturated Hydraulic and Leachate Conductivity and Intrinsic Permeability~~	~~F~~	~~9100~~
~~23.~~	~~O-Phosphate-P~~	~~F~~	~~9056~~
~~**L.**~~	~~Asbestos:~~	~~Key~~	~~Method~~
~~1.~~	~~Fiber Counting~~	~~G~~	~~7400, 7402~~
~~2.~~	~~Bulk Asbestos~~	~~G~~	~~9002~~
~~–~~		~~H~~	~~Bulk Asbestos~~
~~**M.**~~	~~Radiochemical:~~	~~Key~~	~~Method~~
~~1.~~	~~Gross Alpha and Beta~~	~~F~~	~~9310~~
~~2.~~	~~Alpha-Emitting Radium Isotopes~~	~~F~~	~~9315~~
~~3.~~	~~Radium-228~~	~~F~~	~~9320~~

R9-14-614. Air ~~Sample Methods~~ and Stack Compliance Testing

~~**A.** When conducting compliance testing of an air sample for a listed contaminant or group of contaminants, a laboratory shall use at least one of the corresponding methods listed below, unless the laboratory uses an alternate method approved by the Department for such testing under A.A.C. R9-14-610(B). Where two methods listed are joined by the word "and," a laboratory shall use both methods listed. To locate the source of each method listed, cross-reference the capital letter listed under the term "Key" below to the corresponding key reference list in A.A.C. R9-14-610(A).~~

A licensee for a laboratory that conducts air or stack compliance testing shall ensure that each air or stack sample for Arizona compliance testing is analyzed using an approved method:

1. Listed under Exhibit I, Section D, Air and Stack Parameters; or
2. Approved by the Department for air or stack compliance testing under R9-14-610(C).

~~**B.**~~	~~Ambient air:~~	~~Key~~	~~Method~~
~~1.~~	~~Carbon Monoxide~~	~~O~~	~~Appendix C~~
~~2.~~	~~Hydrocarbons~~	~~O~~	~~Appendix E~~
~~3.~~	~~Lead~~	~~O~~	~~Appendix G~~
~~4.~~	~~Nitrogen Dioxide~~	~~O~~	~~Appendix F~~
~~5.~~	~~Ozone~~	~~O~~	~~Appendix D, H~~
~~6.~~	~~Particulate Matter~~	~~O~~	~~Appendix B, J, K~~
~~7.~~	~~Sulfur Oxides~~	~~O~~	~~Appendix A~~
~~8.~~	~~Formaldehyde~~	~~F~~	~~8520~~
~~**C.**~~	~~Stationary and stack sources:~~	~~Key~~	~~Method~~
~~1.~~	~~Carbon Dioxide, Oxygen, and Excess Air~~	~~Q~~	~~Method 3~~
~~2.~~	~~Carbon Monoxide~~	~~Q~~	~~Method 10, 10A, 10B~~
~~3.~~	~~Carbonyl Sulfide, Hydrogen Sulfide, and Carbon Disulfide~~	~~Q~~	~~Method 15~~
~~4.~~	~~Fluoride~~	~~Q~~	~~Method 13A, 13B, 14~~
~~5.~~	~~Fugitive Emissions~~	~~Q~~	~~Method 22~~
~~6.~~	~~Gaseous Organic Compounds~~	~~Q~~	~~Method 18, 25, 25A, 25B~~
~~7.~~	~~Hydrogen Sulfide~~	~~Q~~	~~Method 11~~

~~8.~~	~~Inorganic Lead~~	~~Q~~	~~Method 12~~
~~9.~~	~~Moisture Content~~	~~Q~~	~~Method 4~~
~~10.~~	~~Nitrogen Oxide~~	~~Q~~	~~Method 7, 7A, 7B, 7C, 7D, 7E, 19, 20~~
~~11.~~	~~Particulate Emissions:~~		
~~a.~~	~~Asphalt Processing~~	~~Q~~	~~Method 5A~~
~~b.~~	~~Fiberglass Insulation~~	~~Q~~	~~Method 5E~~
~~c.~~	~~Nonsulfate~~	~~Q~~	~~Method 5F~~
~~d.~~	~~Nonsulfuric Acid~~	~~Q~~	~~Method 5B~~
~~e.~~	~~Pressure Filters~~	~~Q~~	~~Method 5D~~
~~f.~~	~~Stationary Sources~~	~~Q~~	~~Method 5, 17~~
~~g.~~	~~Sulfur Dioxide~~	~~Q~~	~~Method 19~~
~~h.~~	~~Wood Heaters~~	~~Q~~	~~Method 5G, 5H~~
~~12.~~	~~Petroleum Product Analysis:~~		
~~a.~~	~~Hydrometer Method~~	~~I~~	~~D287-92~~
~~b.~~	~~Sulfur~~	~~I~~	~~D4294-90~~
~~c.~~	~~Heat of Combustion~~	~~I~~	~~D240-92~~
~~13.~~	~~Sulfur and Total Reduced Sulfur~~	~~Q~~	~~Method 15A, 16, 16A, 16B~~
~~14.~~	~~Sulfur Dioxide~~	~~Q~~	~~Method 6, 6A, 6B, 6C, 8, 19, 20~~
~~15.~~	~~Sulfuric Acid Mist~~	~~Q~~	~~Method 8~~
~~16.~~	~~Vapor Tightness Gasoline Delivery Tank~~	~~Q~~	~~Method 27~~
~~17.~~	~~Volatile Matter, Density Solids and Water~~	~~Q~~	~~Method 24, 24A~~
~~18.~~	~~Volatile Organic Compounds~~	~~Q~~	~~Method 21~~
		~~S1~~	~~TO-15~~
~~19.~~	~~Wood Heaters Certification and Burn Rates~~	~~Q~~	~~Method 28, 28A~~
~~**D.**~~	~~ADEQ emission tests:~~	~~Key~~	~~Method~~
~~1.~~	~~Particulate Emissions:~~		
~~a.~~	~~Sulfuric Acid Mist/Sulfur Oxides~~	~~R~~	~~Method A1~~
~~b.~~	~~Dry Matter~~	~~R~~	~~Method A2~~
~~**E.**~~	~~National emission standards for hazardous air pollutants:~~	~~Key~~	~~Method~~
~~1.~~	~~Arsenic~~	~~S~~	~~Method 108, 108A, 108B, 108C~~
~~2.~~	~~Beryllium~~	~~S~~	~~Method 103, 104~~
~~3.~~	~~Mercury~~	~~S~~	~~Method 101, 101A, 102, 105~~
~~4.~~	~~Polonium-210~~	~~S~~	~~Method 111~~
~~5.~~	~~Vinyl Chloride~~	~~S~~	~~Method 106, 107, 107A~~

R9-14-615. Quality Assurance

A. A licensee or ~~an~~ applicant shall ensure that the ~~laboratory's~~ analytical data produced at the licensee's or applicant's laboratory are of known and acceptable precision and accuracy, as prescribed by the approved method for each analysis or as prescribed by the limits ~~established~~ described under subsection (C)(~~8~~9), and are scientifically valid and defensible.

B. A licensee or ~~an~~ applicant shall have, implement, and comply with a written quality assurance plan that contains the following and is available at the laboratory for Department review:

1. A title page identifying the laboratory and date of review and including the laboratory director's signature of approval;
2. A table of contents;
3. ~~A detailed statement of the laboratory organization~~ An organization chart or list of the laboratory personnel, including names, line of authority, and identification of principal quality assurance personnel;
4. A copy of the current laboratory license and a list of licensed parameters;
~~4.~~5. A statement of quality assurance objectives, including data quality objectives with precision and accuracy goals and the criteria ~~that the laboratory will use to judge~~ for determining the acceptability of each testing;
~~5.~~6. Specifications for:
   a. Sample containers,
   b. Preparation of sample containers,
   c. Preservation of samples, and
   d. Maximum allowable holding times;
~~6.~~7. A procedure for documenting laboratory receipt of samples and tracking of samples ~~throughout~~ during laboratory testing;
~~7.~~8. A procedure for analytical instrument calibration, including frequency of calibration and complying with the requirements for calibration in subsection (C);
~~8. A copy of the laboratory's current license and a list of licensed parameters;~~
9. ~~Procedures~~ A procedure for compliance testing data reduction and validation and reporting of final results, including the identification and treatment of data outliers, the determination of the ~~completeness and~~ accuracy of data transcription, and all calculations;
10. A statement of the frequency of all quality control checks;
11. A statement of the acceptance criteria for all quality control checks;
12. Preventive maintenance procedures and schedules;
13. Assessment procedures for data acceptability;
14. Corrective action procedures to be taken when results from analytical quality control checks are unacceptable, including ~~the~~ steps ~~taken~~ to demonstrate the presence of any interference if the precision, accuracy, or ~~practical quantitation~~ limit of quantitation of the reported compliance testing result is affected by the interference; and
15. Procedures for chain-of-custody documentation, including procedures for the documentation and reporting of any deviation from the sample handling or preservation requirements listed in this Section.

C. A licensee or ~~an~~ applicant shall:

1. Have available at the laboratory all methods, equipment, reagents, and glassware necessary for the compliance testing for which the ~~laboratory~~ licensee or applicant is licensed or is requesting a license;
2. Use and document the use of only reagents of a grade equal to or greater than that required by the approved methods ~~in A.A.C. R9-14-611 through A.A.C. R9-14-614~~;
3. Maintain and require each analyst to comply with a complete and current standard operating ~~procedures~~ procedure for ~~all~~ each licensed ~~methods~~ method, which shall include at least:
   a. A requirement that the method be performed in compliance with the requirements in:
      i. The approved method, or
      ii. The approved method with any method alterations approved by the Director under R9-14-610(C);
   b. A description of all procedures to be followed when the method is performed;
   c. A list of the concentrations for calibration standards, check standards, and spikes;
   d. Requirements for instrumental conditions and set up;
   e. A requirement for frequency of calibration;
   f. Calculations for the quantitation of the final concentration of samples, with the actual sample dilution factors and the calibration algorithm used, which reflect the procedures followed; and
   g. Requirements for preventative maintenance;
4. Calibrate ~~equipment according to the manufacturer's specifications and~~ each instrument as required by ~~the~~ each approved method for which the equipment is used, as follows:
   a. If a calibration model is specified in the method, using the specified calibration model or, if another calibration model has been approved by ADHS as a method alteration, using the calibration model approved as a method alteration;
   b. If multiple calibration models are included as options in the method, using one of the included calibration models

or, if another calibration model has been approved by ADHS as a method alteration, using the calibration model approved as a method alteration; or

c. If the method does not include a calibration model, using the manufacturer's specifications for calibration;

5. Maintain calibration documentation ~~available for onsite review~~, including documentation that demonstrates the calculations performed using each calibration model;
6. Develop, document, and maintain a current ~~method~~ limit of detection ~~limits~~ and ~~method reporting limits~~ limit of quantitation for each compliance parameter for each instrument;
7. Develop each limit of detection using:
   a. The protocol in the applicable test method;
   b. The protocol in the applicable federal regulation; or
   c. A process that complies with the guidelines in Section D.1.2 of Chapter 5, Appendix D—Essential Quality Control Requirements, in National Environmental Laboratory Accreditation Conference, EPA Pub. No. EPA/600/R-04/003, 2003 NELAC Standard (June 5, 2003), including no future editions or amendments, which is incorporated by reference, on file with the Department, and available from the National Environmental Laboratory Accreditation Conference, US EPA ORD/NERL, Mailcode E243-05, RTP, NC 27711, or at www.epa.gov/nelac/;

~~7.~~8. Maintain all compliance testing equipment in proper operating condition;
~~8.~~9. ~~Statistically develop limits from historical data, if the laboratory tests for a~~ For each parameter tested at the laboratory for which quality control acceptance criteria are not specified in the approved method or by EPA or ADEQ~~,~~;
   a. Use default limits provided in Exhibit II; or
   b. Statistically develop limits from historical data by:
      ~~a.~~ i. Determining the mean and standard deviation for a minimum of 20 data points not invalidated for cause, excluding statistical outliers~~,~~; ~~and~~
      ~~b.~~ ii. Setting the limits no more than three standard deviations from the mean and in the detectable range, using as the lower end of the detectable range the limit of quantitation or the lowest standard value represented in the initial calibration; and
      iii. Explaining the origin of the lower end of the detectable range in the laboratory's standard operating procedure; ~~and~~

~~9.~~10. Discard or segregate all expired standards or reagents ~~from all compliance testing~~;
11. Maintain a record showing the traceability of reagents; and
12. Ensure that a calibration model is not used or changed to avoid necessary instrument maintenance.

D. A licensee or ~~an~~ applicant may submit a written request to the Department for an exemption from subsection (C)(1) for a specific parameter if the licensee or applicant:
1. Documents that the ~~laboratory has performed the~~ approved method has been performed at the laboratory and that the analytical data generated were scientifically valid and defensible and of known and acceptable precision and accuracy, and
2. Documents the ~~laboratory's~~ licensee's or applicant's ability to obtain the equipment, reagent, or glassware necessary to perform the approved method.

E. The written request for an exemption under subsection (D) shall include:
1. The name, address, and main telephone number of the laboratory;
2. The name, address, and telephone number of the licensee or applicant submitting the request;
3. Identification of the ~~method~~ parameter and the equipment, reagent, or glassware for which the licensee or applicant is requesting an exemption; and
4. The documentation described in subsections (D)(1) and (2).

F. The Department may approve a request for an exemption under subsection (D) if it determines:
1. That the ~~laboratory has performed the~~ approved method has been performed at the laboratory;
2. That the analytical data generated were scientifically valid and defensible and of known and acceptable precision and accuracy; and
3. That the ~~laboratory~~ licensee or applicant is able to obtain the equipment, reagent, or glassware necessary to perform the approved method.

G. A licensee or applicant shall ensure that a laboratory's written quality assurance plan is a separate document available at the laboratory and includes all of the components required in subsection (B), but a licensee or applicant may satisfy the components required in subsections (B)(3) through (15) through incorporating by reference provisions in separate documents such as standard operating procedures.

H. A licensee or applicant shall ensure that each laboratory standard operating procedure is a separate document available at the laboratory and includes all of the components required in subsection (C)(3), but a licensee or applicant may satisfy the components required in subsections (C)(3)(f) and (g) through incorporating by reference provisions in separate documents such as other standard operating procedures.

R9-14-616. Operation

~~A. A compliance sample accepted by a laboratory may be analyzed by the accepting laboratory or another laboratory licensed under this Article or exempted under A.R.S. § 36-495.02(A) or A.A.C. R9-14-602. A proficiency evaluation audit sample shall be analyzed by the accepting laboratory only.~~ A licensee shall ensure that:

1. A compliance testing sample accepted at the licensee's laboratory is analyzed:
   a. At the licensee's laboratory,
   b. At another laboratory licensed under this Article, or
   c. At a laboratory exempted under A.R.S. § 36-495.02(A) or R9-14-602;

~~B. If the laboratory performing analysis is not the accepting laboratory, all reports required by A.A.C. R9-14-617 shall include the name and address of the accepting laboratory and the name and address of the laboratory analyzing the compliance sample.~~

~~C. Each licensed laboratory shall:~~

~~1.~~2. ~~Maintain the~~ The facility and utilities required to operate equipment and perform compliance testing are maintained;

~~2.~~3. ~~Provide environmental~~ Environmental controls are maintained within the laboratory to ensure that laboratory environmental conditions do not affect analytical results beyond quality control limits established for the ~~approved~~ methods ~~listed in A.A.C. R9-14-611 through A.A.C. R9-14-614~~ performed at the laboratory;

~~3.~~4. ~~Provide for storage~~ Storage, handling, and disposal of hazardous materials at the laboratory are in accordance with all state and federal regulations; ~~and~~

~~4.~~5. ~~Maintain the~~ The following information is maintained for all ~~relating to~~ supervisory, quality assurance, and analytical personnel:

   a. A summary of each individual's education and professional experience;
   b. Documentation of each individual's review of the ~~laboratory~~ quality assurance plan required under R9-14-615(B) and the approved methods and laboratory standard operating procedures ~~within the~~ for each area ~~or areas~~ of testing performed by the individual or for which the individual has supervisory or quality assurance responsibility ~~or performs testing~~;
   c. Documentation of each analyst's completion of training on the use of equipment and of proper laboratory technique, including the name of the analyst, the name of the instructor, the duration of the training, and the date of completion of the training;
   d. Documentation of each analyst's completion of ~~all~~ training classes, continuing education courses, seminars, and conferences that relate to the testing procedures used by the analyst for compliance testing;
   e. Documentation of each analyst's completion of Initial Demonstration of Capability as required by ~~the~~ each approved ~~methods~~ method performed by the analyst, as applicable;
   f. Documentation of each analyst's performance of proficiency ~~evaluation~~ testing, as applicable; ~~and~~
   g. Documentation of each analyst's completion of training related to instrument calibration that includes:
      i. Instruction on each calibration model that the analyst will use or for which the analyst will review data;
      ii. For each calibration model described in subsection (5)(g)(i), the specific aspects of the calibration model that might compromise the data quality, such as detector saturation, lack of detector sensitivity, the calibration model's not accurately reflecting the calibration points, inappropriate extension of the calibration range, weighting factors, and inappropriate dropping of mid-level calibration points without justification; and
      iii. Instruction that a calibration model shall not be used or changed to avoid necessary instrument maintenance; and

   ~~g.~~h. Documentation of each individual's applicable certifications and specialized training~~.~~; and

~~D.~~ 6.~~A~~ The licensee ~~shall comply~~ complies with all applicable federal, state, and local occupational safety and health regulations.

R9-14-617. Laboratory Records and Reports

~~A.~~ A licensee or applicant shall ensure that:

1. Each ~~Records and reports~~ record and report required to be maintained by this Article ~~shall be~~ is available for inspection and copying by the Department during normal business hours ~~by representatives of the Department.~~;
2. ~~Representatives of the~~ The Department ~~may~~ is permitted to remove copied records and reports from a laboratory~~.~~;

~~B.~~ 3.~~A~~ The licensee ~~shall maintain~~ or applicant maintains records and reports of compliance testing ~~and the ability to reproduce all electronic data~~ for at least five years ~~from~~ after the date of compliance testing~~. A licensee shall maintain~~, with:

   a. All records and reports for at least the most current two years maintained onsite at the laboratory and ~~may store~~ the remaining records and reports stored in a secure storage facility~~.~~;
   b. Each hard copy document containing data either maintained as a hard copy document or scanned into a PDF file or another electronic file format that preserves an exact copy of the hard copy data; and
   c. All instrument-generated electronic data maintained in a reproducible format from which reports can be produced and printed;

4. No portion of a record or report of compliance testing is altered or deleted to hide or misrepresent any part of the data;

~~C.~~ 5. ~~A~~ The licensee ~~shall produce~~ or applicant produces all records and reports requested by the Department within 24 hours ~~of~~ after the request. ~~The Department may extend the 24-hour time period~~ or, if the licensee or applicant requires a period longer than 24 hours, a longer period of time specified by the Department.;

~~D.~~ 6. ~~If data from Arizona compliance samples are not available for inspection and copying, the~~ Upon Department request, the licensee ~~shall make~~ or applicant makes available for inspection and copying ~~any current~~ the requested data from ~~out-of-state~~ non-Arizona compliance samples ~~when such data are requested by Department representatives.~~;

~~E.~~ 7. A compliance testing record ~~shall contain~~ contains:

~~1.~~ a. Sample information, including the following:

~~a.~~ i. A unique sample identification assigned ~~by~~ at the laboratory,

~~b.~~ ii. The location or location code of sample collection,

~~c.~~ iii. The sample collection date and time,

~~d.~~ iv. The type of testing to be performed, and

~~e.~~ v. The name of the individual who collected the sample;

~~2.~~ b. The name and address of the client submitting the sample to the laboratory;

~~3.~~ c. The name of the individual who submitted the sample to the laboratory;

~~4.~~ d. The date and time of ~~the laboratory's~~ receipt of the sample at the laboratory;

~~5.~~ e. The name of the individual who received the sample ~~into~~ at the laboratory;

~~6.~~ f. The dates and times of testing, including the date and time of each critical step;

~~7.~~ g. The actual results of compliance testing, including all raw data, work sheets, and calculations performed;

~~8.~~ h. The actual results of quality control data validating the test results, including the calibration and calculations performed;

~~9.~~ i. The name of ~~the~~ each analyst ~~or analysts~~ who performed the testing; and

~~10.~~ j. A copy of the final report.;

~~F.~~ 8. A final report of compliance testing ~~shall contain~~ contains:

~~1.~~ a. The name, address, and telephone number of the laboratory;

~~2.~~ b. The license number assigned to the laboratory by the Department;

~~3.~~ c. Actual scientifically valid and defensible results of compliance testing in appropriate units of measure, obtained in accordance with ~~the~~ an approved method and ~~the laboratory~~ quality assurance plan~~, as described in A.A.C. R9-14-615~~;

~~4.~~ d. ~~Results~~ Qualified results of compliance testing not obtained in accordance with ~~the~~ an approved method and ~~the laboratory~~ quality assurance plan;

~~5.~~ e. A list of ~~the~~ each approved ~~methods~~ method used to obtain the reported results;

~~6.~~ f. Sample information, including the following:

~~a.~~ i. The unique sample identification assigned ~~by~~ at the laboratory,

~~b.~~ ii. The location or location code of sample collection,

~~c.~~ iii. The sample collection date and time,

~~d.~~ iv. The name of the individual who collected the sample,

~~e.~~ v. The name of the client that submitted the sample to the laboratory, and

~~f.~~ vi. The name of the individual who submitted the sample to the laboratory;

~~7.~~ g. The date of analysis for each parameter reported;

~~8.~~ h. The date of the final report; and

~~9.~~ i. The laboratory director's or designee's signature.

R9-14-618. Mobile Laboratories

A. An applicant shall obtain a license for each mobile laboratory, unless the applicant chooses the single license option for multiple laboratories as described in ~~A.A.C. R9-14-603(E)~~ R9-14-603(D).

B. A licensee or applicant for a mobile laboratory shall ensure that the mobile laboratory is operated in compliance with ~~meet~~ all of the requirements of this Article.

~~B.~~**C.** Upon Department request, ~~the~~ a licensee ~~of~~ or applicant for a mobile laboratory shall provide to the Department the mobile laboratory's location and a list of the parameters it is testing.

R9-14-619. Out-of-State Environmental Laboratory Licensing

A. ~~An~~ A licensee or applicant for an out-of-state laboratory ~~applying for or possessing an initial license or a renewal license~~ at which Arizona compliance testing is performed shall comply with the requirements of A.R.S. Title 36, Chapter 4.3 and this Article.

B. ~~The~~ A licensee or applicant for an out-of-state laboratory shall pay all actual expenses incurred by the Department as a result of the laboratory's location ~~in another state~~, including:

1. The estimated costs of each laboratory inspection or investigation at the laboratory;

2. The amount by which the actual costs of each laboratory inspection or investigation at a laboratory exceed the estimated costs;
3. Additional expenses incurred by the Department for each investigation at the laboratory; and
4. A zone fee for each Department representative required to appear at the laboratory to perform the laboratory inspection or investigation, as follows:
   a. For zone 1, including California, Nevada, Utah, Colorado, and New Mexico: $~~88.00~~114;
   b. For zone 2, including all states west of the Mississippi River not listed in subsection (B)(4)(a): $~~139.00~~179;
   c. For zone 3, including all states east of the Mississippi River and Alaska and Hawaii: $~~225.00~~290.; and
   d. For zone 4, including all countries outside of the United States: $516.

C. The Department shall:
1. ~~determines~~ Determine the estimated costs and zone fees for a laboratory inspection or investigation after making travel arrangements to visit ~~the~~ an out-of-state laboratory.;
2. ~~The Department then sends~~ Send the licensee or applicant for an out-of-state laboratory a bill for the estimated costs and zone fees ~~to the licensee or applicant for the out-of-state laboratory. The licensee or applicant for the out-of-state laboratory shall~~, with instructions to submit the amount billed to the Department ~~the amount of the estimated costs and zone fees~~ within 20 days ~~from~~ after the date that the Department ~~sent~~ sends the bill.; and

~~**D.**~~ 3. After a laboratory inspection or investigation is completed, ~~the Department determines~~ determine the actual costs for the ~~laboratory~~ inspection or investigation and any additional expenses incurred for an investigation ~~at a laboratory.~~ and either:

~~1.~~ a. If the actual costs and additional expenses exceed the estimated costs and zone fees already paid ~~as described in subsection (C)~~, ~~the Department sends~~ send a bill to the licensee or applicant for the out-of-state laboratory for the amount by which the actual costs and expenses exceed the estimated costs and zone fees paid~~. The licensee or applicant for the out-of-state laboratory shall~~, with instructions to submit the amount billed to the Department ~~the amount by which the actual costs and expenses exceed the estimated costs and zone fees paid~~ within 20 days ~~from~~ after the date that the Department ~~sent~~ sends the bill.; or

~~2.~~ b. If the actual costs and expenses are less than the estimated costs and zone fees already paid ~~as described in subsection (C)~~, ~~the Department shall~~ notify the licensee or applicant, determine whether the licensee or applicant desires a refund or a credit, and send a refund or issue a credit ~~to the licensee or applicant for the out-of-state laboratory for the amount by which the estimated costs and zone fees paid exceed the actual costs and expenses. Upon determining that the estimated costs and zone fees paid exceed the actual costs and expenses, the Department shall notify the licensee or applicant and ask whether the licensee or applicant desires a refund or a credit. The Department shall send the refund or issue the credit for the amount by which the estimated costs and zone fees paid exceed the actual costs and expenses~~ within 45 days ~~from~~ after the date that the licensee or applicant ~~specified~~ specifies the desired form of payment.

R9-14-620. Changes to a License

A. During the term of a license, a licensee may request to have one or more parameters added to the license.
B. To request to have one or more parameters added to a license, a licensee shall submit to the Department:
1. A written request that includes:
   a. The name, address, and telephone number of the licensee submitting the request;
   b. The name, address, and telephone number of the laboratory for which the addition is requested; and
   c. Identification of each parameter requested to be added;
2. The applicable method and instrumentation fees, as determined according to Tables 1 and 2 in Exhibit I, payable to the Arizona Department of Health Services by credit card; certified check; business check; or money order; or, if the owner is an Arizona state agency, purchase order;
3. If the addition results in a different Level of license, the difference between the application fee paid with the most recent application and the application fee for the new Level of license required under R9-14-607(A)(2), payable to the Arizona Department of Health Services as provided in subsection (B)(2); and
4. The following for each parameter requested to be added:
   a. The limit of detection, if applicable;
   b. A copy of a proficiency testing report; and
   c. A copy of the standard operating procedure.

C. The Department may conduct a laboratory inspection during the substantive review period for a request to have one or more parameters added to a license.
D. The Department shall process a request to have one or more parameters added to a license as provided in R9-14-621.
E. A licensee may request deletion of parameters at no charge three times during a license period, but shall pay $17 per parameter for the fourth and each subsequent deletion requested during a license period.

~~R9-14-620~~ R9-14-621.Time-frames

A. The overall time-frame described in A.R.S. § 41-1072 for each type of approval granted by the Department under this Article is set forth in Table 1.
1. ~~The licensee or~~ An applicant and the Department may agree in writing to extend the substantive review time-frame and the overall time-frame.
2. An extension of the substantive review time-frame and the overall time-frame may not exceed 25% of the overall time-frame.

B. The administrative completeness review time-frame described in A.R.S. § 41-1072 for each type of approval granted by the Department under this Article is set forth in Table 1 and begins on the date that the Department receives an application or request for approval.
1. The Department shall ~~mail~~ send a notice of administrative completeness or deficiencies to ~~the licensee or~~ an applicant within the administrative completeness review time-frame.
   a. A notice of deficiencies shall list each deficiency and the information or items needed to complete the application or request for approval.
   b. The administrative completeness review time-frame and the overall time-frame are suspended from the date that ~~the~~ a notice of deficiencies is ~~issued~~ sent until the date that the Department receives all of the missing information or items from ~~the licensee or~~ an applicant.

~~c.~~ 2. If ~~the licensee or~~ an applicant fails to submit to the Department all of the information and items listed in ~~the~~ a notice of deficiencies within ~~180~~ 60 days ~~from~~ after the date that the Department ~~mailed~~ sent the notice of deficiencies, the Department shall consider the application or request for approval withdrawn and deny the license or other approval requested.

~~2.~~3. If the Department issues a license or other approval to ~~the licensee or~~ an applicant during the administrative completeness review time-frame, the Department shall not issue a separate written notice of administrative completeness.

C. The substantive review time-frame described in A.R.S. § 41-1072 is set forth in Table 1 and begins on the date of ~~the~~ a notice of administrative completeness.
1. As part of the substantive review for an initial license application, the Department ~~shall~~ may conduct a laboratory inspection ~~and may conduct an~~, investigation, or ~~a~~ proficiency ~~evaluation audit~~ testing, or ~~both~~ a combination of the three, as described in R9-14-605.
   a. The Department shall commence ~~the~~ a laboratory inspection, investigation, or proficiency ~~evaluation audit~~ testing, or combination of the ~~3~~three, no more than 30 days after notice of administrative completeness has been mailed for an in-state laboratory or no more than 60 days after notice of administrative completeness has been mailed for an out-of-state laboratory.
   b. The Department and an applicant may mutually agree in writing to ~~extend the~~ schedule a laboratory inspection, proficiency ~~evaluation audit~~ testing, or investigation ~~dates~~ later than the date required under subsection (C)(1)(a).
2. The Department shall ~~mail~~ send written notification of approval or denial of ~~the~~ a license application or other ~~request for~~ approval to ~~the licensee or~~ an applicant within the substantive review time-frame.
3. During the substantive review time-frame, the Department may make one comprehensive written request for additional information, unless the Department and ~~the licensee or~~ applicant have agreed in writing to allow the Department to submit supplemental requests for information.
4. If the Department issues a comprehensive written request or a supplemental request for information, the substantive review time-frame and the overall time-frame ~~shall be~~ are suspended from the date that the Department issues the request until the date that the Department receives all of the information requested.
5. If an applicant fails to submit to the Department all of the information and items listed in a comprehensive written request or a supplemental request for information within 60 days after the date that the Department sent the comprehensive written request or supplemental request for information, the Department shall deny the license or other approval requested.

~~5.~~6. The Department shall ~~issue an~~ grant a license or other approval unless:
   a. An applicant fails to submit requested information as described in subsection (B)(2) or (C)(5);
   ~~a.~~b. For an initial license application or a regular license renewal application where the regular license is not suspended, the Department determines that grounds to deny the license exist under A.R.S. § 36-495.09;
   ~~b.~~c. For a regular license renewal application where the regular license is suspended, the Department determines that the licensee is not in full compliance with the corrective action plan; A.R.S. Title 36, Chapter 4.3; and this Article;
   ~~c.~~d. For a request for approval of ~~a new~~ an alternate method or method alteration, the Department determines that ~~use of~~ the alternate method or method alteration ~~is not required or authorized by an EPA or ADEQ statute or rule or is not justified as described in A.A.C. R9-14-610(B)(2)(d)~~ does not meet the standard for approval under R9-14-610(C)(4); or
   ~~d.~~e. For a request for approval of an exemption under ~~A.A.C. R9-18-615(D)~~R9-14-615(D), the Department determines that the ~~laboratory has not performed the approved method; that the analytical data generated were not scientifically valid and defensible and of known and acceptable precision and accuracy; or that the laboratory is not~~

~~able to obtain the equipment, reagent, or glassware necessary to perform the method~~ request does not meet the standard for approval under R9-14-615(F).

~~6.~~ 7. If the Department ~~disapproves an application or request for~~ denies a license or other approval, the Department shall send to the applicant a written notice of ~~disapproval~~ denial setting forth the reasons for ~~disapproval~~ denial and all other information required by A.R.S. § 41-1076.

Table 1. Time-frames (in days)

Type of Approval	Statutory Authority	Overall Time-frame	Administrative Completeness Review Time-frame	Substantive Review Time-frame
Initial License–In-State Laboratory	A.R.S. §§ 36-495.01, 36-495.03, 36-495.06, 36-495.07	201	21	180
Initial License–Out-of-State Laboratory	A.R.S. §§ 36-495.01, 36-495.03, 36-495.06, 36-495.07	231	21	210
Regular License Renewal–In-State Laboratory	A.R.S. §§ 36-495.01, 36-495.03, 36-495.06, 36-495.07	37	14	23
Regular License Renewal–Out-of-State Laboratory	A.R.S. §§ 36-495.01, 36-495.03, 36-495.06, 36-495.07, 36-495.14	67	14	53
Regular License Renewal–In-State Laboratory with Provisional License	A.R.S. §§ 36-495.01, 36-495.03, 36-495.05, 36-495.06, 36-495.07	70	21	49
Regular License Renewal–Out-of-State Laboratory with Provisional License	A.R.S. §§ 36-495.01, 36-495.03, 36-495.05, 36-495.06, 36-495.07, 36-495.14	100	21	79
Request for Approval of an Alternate Method or Method Alteration–Required or Authorized by EPA/ADEQ	A.R.S. § 36-495.01, 36-495.06	105	15	90
Request for Approval of an Alternate Method or Method Alteration–Not Required or Authorized by EPA/ADEQ	A.R.S. § 36-495.01, 36-495.06	210	30	180
Request for Approval of an Exemption under ~~A.A.C.~~ R9-14-615(D)	A.R.S. § 36-495.01	60	15	45
Request to Have One or More Parameters Added to a License under R9-14-620—In-State Laboratory	A.R.S. §§ 36-495.01, 36-495.03, 36-495.06, 36-495.07	91	21	70

Request to Have One or More Parameters Added to a License under R9-14-620—Out-of-State Laboratory	A.R.S. §§ 36-495.01, 36-495.03, 36-495.06, 36-495.07	121	21	100

EXHIBIT I. APPROVED METHODS; METHOD FEES; INSTRUMENTATION FEES

Table 1. Approved Methods; Method Fees

SECTION A. DRINKING WATER PARAMETERS			
1. Microbiology of Drinking Water			
Description	**Reference**	**Method/s**	**Fee Per Method**
Aeromonas	Z1	1605	$228
Coliforms, Fecal	C2	9221E	$228
		9222D	$228
	C1	Hach 8001	$228
Coliforms, Total, by Colilert (ONPG-MUG)	C2	9223B	$152
Coliforms, Total, by Colisure	C2	9223B	$152
Coliforms, Total, by Membrane Filtration	C2	9222B	$228
		9222C	$228
Coliforms, Total and *E. coli,* by Membrane Filtration	Z8	1604	$228
Coliforms, Total, by Multiple Tube Fermentation	C2	9221B and C	$228
	C1	Hach 8001	$228
Coliforms, Total, by Presence/Absence	C2	9221D	$228
Escherichia coli	X	Tube Procedure	$228
		Membrane Filter Procedure	$228
Cryptosporidium	P4	1622	$381
Giardia and *Cryptosporidium*	P5	1623	$381
Heterotrophic Plate Count	C2	9215B	$152
	Z4	SimPlate	$152
Microscopic Particulate Analysis	P1	910/9-92-029	$228
Viruses	P2	600/R-95/178	$381
2. Inorganic Chemistry and Physical Properties of Drinking Water			
Description	**Reference**	**Method/s**	**Fee Per Method**
Alkalinity	C2	2320B	$19

Asbestos	H1	100.1	$503
	H2	100.2	$503
Bromate	A6	317.0	$76
	A7	326.0	$76
	Z	300.1	$26
		321.8	$152
Bromide	A2	300.0	$26
	A6	317.0	$76
	A7	326.0	$76
	Z	300.1	$26
Calcium	A1	200.7	$10
	C	3111B	$26
		3500-Ca D	$76
Carbon, Dissolved Organic	A9	415.3	$76
	C2	5310B	$39
		5310C	$39
		5310D	$39
Carbon, Total Organic	A9	415.3	$76
	C2	5310B	$39
		5310C	$39
		5310D	$39
Chloride	A2	300.0	$26
	C2	4500-Cl B	$39
		4500-Cl D	$39
		4110B	$26
Chloramine	C2	4500-Cl D	$39
		4500-Cl F	$39
		4500-Cl G	$76

Chlorine	C2	4500-Cl D	$39
		4500-Cl E	$39
		4500-Cl F	$39
		4500-Cl G	$39
		4500-Cl H	$39
		4500-Cl I	$39
	C1	Hach 8168	$39
		Hach 8167	$39
		Hach 8370	$39
		Hach 8021	$39
Chlorine Dioxide	A8	327.0	$76
	C2	4500-ClO_2 C	$39
		4500-ClO_2 D	$76
		4500-ClO_2 E	$39
Chlorite	A2	300.0	$26
	A6	317.0	$76
	A7	326.0	$76
	A8	327.0	$76
	Z	300.1	$26
Color	C2	2120B	$32
Corrosivity	C2	2330B	$39
Cyanide	A2	335.4	$76
	C2	4500-CN B	$7
		4500-CN C	$13
		4500-CN E	$76
		4500-CN F	$76
	Z9	QuikChem 10-204-00-1-X	$76
Cyanide, Amenable	C2	4500-CN G	$76

Fluoride	A2	300.0	$26
	A3	380-75WE	$39
	C2	4500-F B	$39
		4500-F C	$26
		4500-F D	$39
		4500-F E	$39
		4110B	$26
	C1	Hach 8029	$39
Hardness	A1	200.7, Sum of Ca and Mg as their carbonates	$10
	C2	2340 B, Sum of Ca and Mg as their carbonates	$10
		2340 C	$39
Magnesium	A1	200.7	$10
	C	3111B	$26
Methylene Blue Active Substances	C2	5540 C	$39
Nitrate	A2	353.2	$76
		300.0	$26
	C2	4500-NO_3 D	$39
		4500-NO_3 E	$76
		4500-NO_3 F	$76
		4110B	$26
Nitrite	A2	353.2	$76
		300.0	$26
	C2	4500-NO_2 B	$76
		4500-NO_3 E	$76
		4500-NO_3 F	$76
		4110B	$26
Odor	C2	2150B	$32
Orthophosphate	A2	365.1	$76
		300.0	$26
	C2	4500-P E	$76
		4500-P F	$76
		4110B	$26

Ozone	C	4500-O_3 B	$39
Perchlorate	Z	314.0	$76
		314.1	$76
		331	$152
		332	$152
pH (Hydrogen Ion)	A	150.1	$39
		150.2	$39
	C2	4500-H B	$39
	C1	Hach 8156	$39
Residue, Filterable (TDS)	C2	2540 C	$39
Sediment Concentration	Z6	D 3977-979	$13
Silica	A1	200.7	$10
	C2	4500-Si C	$76
		4500-Si D	$76
		4500-Si E	$76
Sodium	A1	200.7	$10
	C	3111B	$26
Specific Conductance	C2	2510B	$39
	C1	Hach 8160	$39
Sulfate	A2	300.0	$26
		375.2	$76
	C2	4500-SO_4 C	$76
		4500-SO_4 D	$76
		4500-SO_4 E	$76
		4500-SO_4 F	$76
		4110B	$26
Temperature, Degrees Celsius	C2	2550	$13
Turbidity, Nephelometric (NTU)	A2	180.1	$39
	C2	2130B	$39
UV-Absorbing Organic Constituents	C2	5910B	$76
3. Metals in Drinking Water			
a. Sample Preparation for Metals in Drinking Water			
Description	**Reference**	**Method/s**	**Fee Per Method**
Acid Extractable Metals	C	3030C	$7
Microwave Assisted Digestion	C	3030K	$7

Nitric Acid	C	3030E	$7
Nitric Acid/Hydrochloric Acid	C	3030F	$7
Nitric Acid/Perchloric Acid	C	3030H	$7
Nitric Acid/Perchloric Acid/Hydrofluoric Acid	C	3030I	$7
Nitric Acid/Sulfuric Acid	C	3030G	$7
Preliminary Filtration	C	3030B	$7
b. Methods to Analyze Metals in Drinking Water			
Description	**Reference**	**Method/s**	**Fee Per Method**
Aluminum	A1	200.7	$10
		200.8	$26
		200.9	$26
	C	3111D	$26
		3113B	$26
Antimony	A1	200.8	$26
		200.9	$26
	C	3113B	$26
Arsenic	A1	200.8	$26
		200.9	$26
	C	3113B	$26
		3114B	$76
Barium	A1	200.7	$10
		200.8	$26
	C	3111D	$26
		3113B	$26
Beryllium	A1	200.7	$10
		200.8	$26
		200.9	$26
	C	3113B	$26
Cadmium	A1	200.7	$10
		200.8	$26
		200.9	$26
	C	3113B	$26

Chromium, Total	A1	200.7	$10
		200.8	$26
		200.9	$26
	C	3113B	$26
Copper	A1	200.7	$10
		200.8	$26
		200.9	$26
	C	3111B	$26
		3113B	$26
Iron	A1	200.7	$10
		200.9	$26
	C	3111B	$26
		3113B	$26
Lead	A1	200.8	$26
		200.9	$26
	C	3113B	$26
Manganese	A1	200.7	$10
		200.8	$26
		200.9	$26
	C	3111B	$26
		3113B	$26
Mercury	A	245.2	$52
	A1	245.1	$52
		200.8	$26
	C	3112B	$52
Nickel	A1	200.7	$10
		200.8	$26
		200.9	$26
	C	3111B	$26
		3113B	$26
Selenium	A1	200.8	$26
		200.9	$26
	C	3113B	$26
		3114B	$76

Silver	A1	200.7	$10
		200.8	$26
		200.9	$26
	C	3111B	$26
		3113B	$26
Strontium	A1	200.7	$10
	C	3500-Sr B	$26
		3500-Sr C	$20
		3500-Sr D	$26
Thallium	A1	200.8	$26
		200.9	$26
Uranium	A1	200.8	$26
Zinc	A1	200.7	$10
		200.8	$26
	C	3111B	$26
4. Organic Chemistry of Drinking Water			
a. Methods to Comply with National Primary Drinking Water Regulations			
Description	**Reference**	**Method/s**	**Fee Per Method**
Disinfectant Byproducts, Solvents and Pesticides: Alachlor Atrazine Dibromochloropropane Endrin Ethylene dibromide Heptachlor Heptachlorepoxide Hexachlorobenzene Hexachlorocyclopentadiene Lindane Methoxychlor Simazine 1,1,2-Trichloroethane Trichloroethylene 1,1,1-Trichloroethane Tetrachloroethylene Carbontetrachloride Chloroform Bromodichloromethane Dibromochloromethane Bromoform Total Trihalomethanes	D3	551.1 (1.0)	$116

VOCs by GC: Benzene Carbon Tetrachloride (mono) Chlorobenzene o-Dichlorobenzene para-Dichlorobenzene 1,2-Dichloroethane cis-1,2-Dichloroethylene Trans-1,2-Dichloroethylene Dichloromethane 1,2-Dichloropropane Ethylbenzene Styrene Tetrachloroethylene 1,1,1-Trichlorothane Trichloroethylene Toluene 1,2,4-Trichlorobenzene 1,1-Dichloroethylene 1,1,2-Trichloroethane Vinyl chloride Xylenes, Total Chloroform Bromodichloromethane Dibromochloromethane Bromoform Total Trihalomethanes	D3	502.2 (2.1)	$152
VOCs by GC-MS: Benzene Carbon Tetrachloride (mono) Chlorobenzene o-Dichlorobenzene para-Dichlorobenzene 1,2-Dichloroethane cis-1,2-Dichloroethylene Trans-1,2-Dichloroethylene Dichloromethane 1,2-Dichloropropane Ethylbenzene Styrene Tetrachloroethylene 1,1,1-Trichlorothane Trichloroethylene Toluene 1,2,4-Trichlorobenzene 1,1 Dichloroethylene 1,1,2-Trichloroethane Vinyl Chloride Xylenes, Total Chloroform Bromodichloromethane Dibromochloromethane Bromoform Total Trihalomethanes	D3	524.2 (4.1)	$152
EDB/DBCP	D3	504.1 (1.1)	$116

Pesticides and PCBs by GC (Microextraction): Alachlor Atrazine Chlorodane Endrin Heptachlor Heptachlor Epoxide Hexachlorobenzene Hexachlorocyclopentadiene Lindane Methoxychlor Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Simazine Toxaphene	D3	505 (2.1)	$152
Phthalate and Adipate Esters by GC-PID: Di (2-ethylhexyl)adipate Di (2-ethylhexyl)phthalate	D3	506 (1.1)	$116
Pesticides by GC-NPD Atrazine Alachlor Simazine	D3	507 (2.1)	$116
Chlorinated Pesticides by GC-ECD: Chlordane Endrin Heptachlor Heptachlor Epoxide Hexachlorobenzene Hexachlorocyclopentadiene Lindane Methoxychlor Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Toxaphene	D3	508 (3.1)	$152

Chlorinated Pesticides, Herbicides, Organohalides by GC-ECD: Alachlor Atrazine Chlorodane Endrin Heptachlor Heptachlor Epoxide Hexachlorobenzene Hexachlorocyclopentadiene Lindane Methoxychlor Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Simazine Toxaphene	D3	508.1(2.0)	$152
Organics by GC-MS: Alachlor Atrazine Benzo(a)pyrene Chlorodane Di (2-ethylhexyl)adipate Di (2-ethylhexyl)phthalate Endrin Heptachlor Heptachlor Epoxide Hexachlorobenzene Hexachlorocyclopentadiene Lindane Methoxychlor Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Pentachlorophenol Simazine Toxaphene	D3	525.2 (2.0)	$152
Carbamates by HPLC/Post Column: Carbofuran Oxamyl	D3	531.1 (3.1)	$116
	D7	531.2	$116

Chlorinated Acids and Dalapon by GC-ECD: 2,4-D Dalapon Dinoseb Pentachlorophenol Picloram Silvex (2,4,5-TP)	D	515.1 (4.0)	$116
	D6	515.3 (1.0)	$116
	D8	515.4 (1.0)	$116
Chlorinated Acids By GC-ECD 2,4-D Dinoseb Pentachlorophenol Picloram Silvex (2,4,5-TP)	D3	515.2 (1.1)	$116
PAHs By HPLC/UV/FL: Benzo(a)pyrene	D1	550	$116
		550.1	$116
Haloacetic Acids and Dalapon by GC-ECD: Dalapon Monochloracetic Acid Dichloracetic Acid Trichloroacetic Acid Monobromoacetic Acid Dibromoacetic Acid HAA5	D2	552.1 (1.0)	$116
	D3	552.2 (1.0)	$116
Haloacetic Acids: Monochloroacetic Acid Dichloroacetic Acid Trichloroacetic Acid Monobromoacetic Acid Dibromoacetic Acid HAA5	D13	552.3	$116
Disinfection Byproducts by Micro Liquid-Liquid Extraction/GC-ECD	C2	6251B	$116
Chlorinated Acids By HPLC/PDA/UV: 2,4-D Dinoseb Pentachlorophenol Picloram Silvex (2,4,5-TP)	D2	555 (1.0)	$116
Dioxin	E	1613	$258

Diquat	D5	549.2 (1.0)	$116
Endothall	D2	548.1 (1.0)	$116
Glyphosate	D1	547	$116
PCBs (as decachlorobiphenyl)	D	508A (1.0)	$152
b. Additional Methods and Compounds Required by Other Programs			
Description	**Reference**	**Method/s**	**Fee Per Method**
Disinfectant Byproducts, Solvents and Pesticides	D3	551.1 (1.0)	$26
VOCs by GC	D3	502.2 (2.1)	$26
VOCs by GC-MS	D3	524.2 (4.1)	$26
EDB/DBCP	D3	504.1 (1.1)	$26
Pesticides and PCBs by GC (Microextraction)	D3	505 (2.1)	$26
Phthalate and Adipate Esters by GC-PID	D3	506 (1.1)	$26
Pesticides by GC-NPD	D3	507 (2.1)	$26
Chlorinated Pesticides by GC-ECD	D3	508 (3.1)	$26
Chlorinated Pesticides, Herbicides, Organohalides by GC-ECD	D3	508.1(2.0)	$26
Organics by GC-MS	D3	525.2 (2.0)	$26
Carbamates by HPLC/Post Column	D3	531.1 (3.1)	$26
	D7	531.2	$26
Chlorinated Acids and Dalapon by GC-ECD	D	515.1 (4.0)	$26
	D6	515.3 (1.0)	$26
	D8	515.4 (1.0)	$26
Chlorinated Acids By GC-ECD	D3	515.2 (1.1)	$26
PAHs By HPLC/UV/FL	D1	550	$26
		550.1	$26
Haloacetic Acids and Dalapon by GC-ECD	D2	552.1 (1.0)	$26
	D3	552.2 (1.0)	$26
Chlorinated Acids By HPLC/PDA/UV	D2	555 (1.0)	$26
Dioxins and Furans	E	1613	$65
Diquat and Paraquat	D5	549.2 (1.0)	$26
Benzidines and Nitrogen Compounds	D2	553 (1.1)	$116
Carbonyl Compounds	D2	554 (1.0)	$116
Phenols	Z	528	$152
Phenylurea Compounds	Z	532	$116
Selected Semivolatiles	Z	526	$152

Pesticides and Flame Retardants by GCMS	D9	527	$152
Explosives and Related Compounds	D10	529	$152
Acetanilide Degradation Products	D11	535 (1.1)	$194
Acetanilide Parent Compound	D3	525.2 (2.0)	$26
Nitrosamines by MS/MS	D12	521	$194
5. Radiochemistry of Drinking Water			
Description	**Reference**	**Method/s**	**Fee Per Method**
Cesium	B	Cesium-134	$206
	C2	7500-Cs B	$206
		7120	$206
	J1	R-1110-76	$206
		R-1111-76	$206
	L	901	$206
		901.1	$206
	U	4.5.2.3	$206
	W	Gamma Spectra	$206
Gamma Emitting Isotopes	C2	7500-Cs B	$206
		7500-I B	$206
		7120	$206
	L	901.1	$206
		901	$206
		902	$206
	W	Gamma Spectra	$206
Gross Alpha	B	Gross Alpha	$206
	C2	7110B	$206
		7110C	$206
	J1	R-1120-76	$206
	L	900	$206
	V	00-01	$206
		00-02	$206
	W	Gross Alpha	$206

Gross Beta	B	Gross Beta	$206
	C2	7110B	$206
	J1	R-1120-76	$206
	L	900	$206
	V	00-01	$206
	W	Gross Beta	$206
Iodine	B	Precipitation Method, Distillation Method	$206
	C2	7500-I B	$206
		7500-I C	$206
		7500-I D	$206
		7120	$206
	L	902	$206
		901.1	$206
	U	4.5.2.3	$206
	W	Gamma Spectra	$206
Radium 226	B	Radon Emanation, Precipitation Method	$206
	C2	7500-Ra B	$206
		7500-Ra C	$206
	J1	R-1140-76	$206
		R-1141-76	$206
	L	903	$206
		903.1	$206
	U	Ra-05	$206
	V	Ra-03	$206
		Ra-04	$206
	W	Radium 226	$206
Radium 228	B	Radium 228	$206
	C2	7500-Ra D	$206
	J1	R-1142-76	$206
	L	904	$206
	V	Ra-05	$206
	W	Radium 228	$206

Strontium	B	Strontium	$206
	C2	7500-Sr B	$206
	J1	R-1160-76	$206
	L	905	$206
	U	Sr-01	$206
		Sr-02	$206
	V	Sr-04	$206
	W	Strontium	$206
Tritium	B	Tritium	$206
	C2	7500-^{3}H B	$206
	J1	R-1171-76	$206
	L	906	$206
	V	H-02	$206
	W	Tritium	$206
Uranium	C2	7500-U B	$206
	I	D5174-91	$206
	J1	R-1180-76	$206
		R-1181-76	$206
		R-1182-76	$206
	L	908	$206
		908.1	$206
	U	U-02	$206
		U-04	$206
	V	00-07	$206
	W	Uranium	$206
SECTION B. WASTEWATER PARAMETERS			
1. Microbiology of Wastewater			
Description	**Reference**	**Method/s**	**Fee Per Method**
Ascaris lumbricoides	C2	10550	$228
	P3	UofA2000	$228
Coliforms, Fecal, by Membrane Filter	C2	9222D	$228
Coliforms, Fecal, by Multiple Tube Fermentation (may be used for sludge)	C2	9221E	$228
Coliforms, Total, by Membrane Filter	C2	9222B	$228
Coliforms, Total, by Multiple Tube Fermentation	C2	9221B	$228

Entamoeba histolytica	C2	10550	$228
	C	9711C	$228
Enteric viruses	I	D4994-89	$381
Escherichia coli (NPDES) by Colilert MPN, in conjunction with SM 9221B and 9221C	C2	9223B	$152
Escherichia coli (NPDES) in conjunction with SM 9221B and 9221C	C2	9221F	$152
Giardia and *Cryptosporidium*	C2	9711B	$381
	P2	600/R-95/178	$381
Helminth Ova in sludge	Z5	600/1-87-014	$381
Salmonella in sludge	C2	9260D	$228
Streptococcus, Fecal, by Membrane Filter	C2	9230C	$194
Streptococcus, Fecal, by Multiple Tube Fermentation	C2	9230B	$194
Tapeworm, Common	C2	10550	$228
Viruses	C2	9510	$381
	P	Methods for Virology	$381
	P2	600/R-95/178	$381
2. Wastewater Inorganic Chemistry, Nutrients and Demand			
Description	**Reference**	**Method/s**	**Fee Per Method**
Acidity	C2	2310B	$39
	C1	Hach 8010	$39
Alkalinity, Total	A	310.2	$19
	C2	2320B	$19
Ammonia	A2	350.1	$39
	C2	4500-NH_3 B	$39
		4500-NH_3 C	$39
		4500-NH_3 D	$39
		4500-NH_3 E	$39
		4500-NH_3 G	$39
	C1	Hach 8038	$39
Biochemical Oxygen Demand	C2	5210B	$152
	C1	Hach 8043	$152
Boron	A1	200.7	$10
	C2	4500-B B	$76

Bromide	A2	300.0	$26
Calcium	A1	200.7	$10
	C	3111B	$26
		3500-Ca D	$39
	C1	Hach 8222	$39
Carbon, Total Organic (TOC)	C2	5310 B	$39
		5310 C	$39
		5310D	$39
Chemical Oxygen Demand	A	410.3	$39
	A2	410.4	$76
	C2	5220 C	$39
		5220 D	$76
	C1	Hach 8000	$39
		Hach 8230	$39
Chloride	A2	300.0	$26
	C2	4500-Cl B	$39
		4500-Cl C	$39
		4500-Cl E	$39
	C1	Hach 8225	$39
Chlorine, Free	C1	Hach 8021	$39
Chlorine, Total Residual	C2	4500-Cl B	$39
		4500-Cl C	$39
		4500-Cl D	$39
		4500-Cl F	$39
		4500-Cl G	$39
	C1	Hach 8167	$39
		Hach 8168	$39
		Hach 10014	$39
Color	C2	2120 B	$32
		2120 C	$32
		2120 E	$32
Cyanide, Amenable to Chlorination	A	335.1	$76
	C2	4500-CN G	$76
Cyanide, Available	Y	OIA-1677	$76

Cyanide, Total	A	335.3	$76
	C2	4500-CN B and either (a) 4500-CN C, (b) 4500-CN D, or (c) 4500-CN E	$89
Fluoride	A2	300.0	$26
	C2	4500-F B	$39
		4500-F C	$39
		4500-F D	$39
		4500-F E	$39
	C1	Hach 8029	$39
Hardness	A	130.1	$10
	A1	200.7	$10
	C2	2340B	$39
		2340C	$39
	C1	Hach 8226	$39
Kjeldahl, Total Nitrogen	A	351.1	$76
		351.4	$76
	A2	351.2	$76
	C2	Combination of 4500-NH_3 B and either (a) 4500-N_{org} B or (b) 4500-N_{org} C	$115
		4500-NH_3 C	$39
	Z10	PAI-DK01	$76
	Z11	PAI-DK02	$76
	Z12	PAI-DK03	$76
Methylene Blue Active Substances	C2	5540C	$39
Nitrate (as N)	A	352.1	$76
	A2	300.0	$26
Nitrate-Nitrite (as N)	A2	300.0	$26
		353.2	$76
	C2	4500-NO_3 E	$76
		4500-NO_3 F	$76
		4500-NO_3 H	$76

Nitrite (as N)	A	354.1	$76
	A2	300.0	$26
	C2	4500-NO_2 B	$76
	C1	Hach 8507	$76
Oil and Grease and Total Petroleum Hydrocarbons	C2	5520B	$76
	K1	1664A	$76
Orthophosphate	A	365.3	$76
	A2	300.0	$26
		365.1	$76
	C2	4500-P E	$76
		4500-P F	$76
	C1	Hach 8048	$39
Oxygen-consumption Rate (SOUR)	C2	2710B	$39
Oxygen, Dissolved	C2	4500-O C	$26
		4500-O G	$26
	C1	Hach 8229	$26
pH (Hydrogen Ion)	A	150.1	$39
	C2	4500-H B	$39
	C1	Hach 8156	$39
Phenols	A	420.1	$116
	C1	Hach 8047	$116
Phosphorus, Total	A	365.3	$76
		365.4	$76
	A2	365.1	$76
	C2	4500-P B	$76
		4500-P E	$76
		4500-P F	$76
	C1	Hach 8190	$76
Potassium	A	258.1	$26
	A1	200.7	$10
	C	3111B	$26
		3500-K D	$26
Residue, Filterable (TDS)	C2	2540C	$39
Residue, Nonfilterable (TSS)	C2	2540D	$39
	C1	Hach 8158	$39

Residue, Settleable Solids	A	160.5	$39
	C2	2540F	$39
Residue, Total	A	160.3	$39
	C2	2540B	$39
Residue, Volatile	A	160.4	$39
Silica, Dissolved	A	370.1	$76
	A1	200.7	$10
	C	4500-Si D	$76
	C2	4500-SiO_2 C	$76
Sodium	A1	200.7	$10
	C	3111B	$26
Sodium Azide	C2	4110C	$76
Specific Conductance	A	120.1	$39
	C2	2510B	$39
	C1	Hach 8160	$39
Sulfate	A	375.1	$76
	A2	300.0	$26
	C2	4500-SO_4 C	$76
		4500-SO_4 D	$76
	C1	Hach 8051	$39
Sulfide (includes total and soluble)	C2	4500-S D	$76
		4500-S F	$39
	C1	Hach 8131	$39
Sulfite	C2	4500-SO_3 B	$76
	C1	Hach 8071	$39
Temperature, Degrees Celsius	C2	2550B	$13
Total, Fixed and Volatile Solids in Solid and Semisolid Samples in Sludge	C2	2540G	$39
Turbidity, NTU	A2	180.1	$39
	C2	2130B	$39
3. Metals in Wastewater			
a. Sample Preparation for Metals in Wastewater			
Description	**Reference**	**Method/s**	**Fee Per Method**
Acid Extractable Metals	C	3030C	$7
Microwave Digestion	Z7	CEM Microwave Digestion	$7

Nitric Acidq	C	3030E	$7
Nitric Acid/Hydrochloric Acid	C	3030F	$7
Nitric Acid/Perchloric Acid	C	3030H	$7
Nitric Acid/Perchloric Acid/Hydrofluoric Acid	C	3030I	$7
Nitric Acid/Sulfuric Acid	C	3030G	$7
Preliminary Filtration	C	3030B	$7
b. Methods to Analyze Metals in Wastewater			
Description	**Reference**	**Method/s**	**Fee Per Method**
Aluminum	A1	200.7	$10
		200.8	$26
		200.9	$26
	C	3113B	$26
		3111D	$26
Antimony	A1	200.7	$10
		200.8	$26
		200.9	$26
	C	3111B	$26
		3113B	$26
Arsenic	A	206.5	$39
	A1	200.7	$10
		200.8	$26
		200.9	$26
	C	3113B	$26
		3500-As C	$76
	C1	Hach 8013	$39
Barium	A1	200.7	$10
		200.8	$26
	C	3111D	$26
		3113B	$26

Beryllium	A1	200.7	$10
		200.8	$26
		200.9	$26
	C	3111D	$26
		3113B	$26
		3500-Be D	$76
Cadmium	A1	200.7	$10
		200.8	$26
		200.9	$26
	C	3111B	$26
		3111C	$26
		3113B	$26
		3500-Cd D	$76
Chromium (VI) Hexavalent	A	218.4	$26
	C	3500-Cr D	$39
		3111C	$26
	C1	Hach 8023	$39
Chromium, Total	A1	200.7	$10
		200.8	$26
		200.9	$26
	C	3111B	$26
		3111C	$26
		3113B	$26
		3500-Cr D	$76
	C1	Hach 8023	$39
Cobalt	A1	200.7	$10
		200.8	$26
		200.9	$26
	C	3111B	$26
		3111C	$26
		3113B	$26

Copper	A1	200.7	$10
		200.8	$26
		200.9	$26
	C	3111B	$26
		3111C	$26
		3113B	$26
		3500-Cu D	$76
	C1	Hach 8506	$39
Gold	A	231.2	$26
	C	3111B	$26
Iridium	A	235.2	$26
	C	3111B	$26
Iron	A1	200.7	$10
		200.9	$26
	C	3111B	$26
		3111C	$26
		3113B	$26
		3500-Fe D	$76
	C1	Hach 8008	$39
Lead	A1	200.7	$10
		200.8	$26
		200.9	$26
	C	3111B	$26
		3111C	$26
		3113B	$26
		3500-Pb D	$76
	C1	Hach 8033	$39
Lithium	A1	200.7	$10
Magnesium	A1	200.7	$10
	C	3111B	$26
		3500-Mg D	$76

Manganese	A1	200.7	$10
		200.8	$26
		200.9	$26
	C	3111B	$26
		3113B	$26
		3500-Mn D	$76
	C1	Hach 8034	$39
Mercury	A	245.2	$52
	A1	245.1	$52
	A4	1631E	$152
	C	3112B	$52
Molybdenum	A1	200.7	$10
		200.8	$26
	C	3111D	$26
		3113B	$26
Nickel	A1	200.7	$10
		200.8	$26
		200.9	$26
	C	3111B	$26
		3111C	$26
		3113B	$26
	C1	Hach 8037	$39
Osmium	A	252.2	$26
	C	3111D	$26
Palladium	A	253.2	$26
	C	3111B	$26
Platinum	A	255.2	$26
	C	3111B	$26
Rhodium	A	265.2	$26
	C	3111B	$26
Ruthenium	A	267.2	$26
	C	3111B	$26

Selenium	A1	200.7	$10
		200.8	$26
		200.9	$26
	C	3113B	$26
		3114B	$76
Silver	A1	200.7	$10
		200.8	$26
		200.9	$26
	C	3111B	$26
		3111C	$26
		3113B	$26
Strontium	A1	200.7	$10
	C	3111B	$26
		3500-Sr B	$26
		3500-Sr C	$20
		3500-Sr D	$26
Thallium	A	279.2	$26
	A1	200.7	$10
		200.8	$26
		200.9	$26
	C	3111B	$26
Tin	A1	200.7	$10
		200.9	$26
	C	3111B	$26
		3113B	$26
Titanium	A	283.2	$26
	C	3111D	$26
Vanadium	A1	200.7	$10
		200.8	$26
	C	3111D	$26
		3500-V D	$76

Zinc	A	289.2	$26
	A1	200.7	$10
		200.8	$26
		200.9	$26
	C	3111B	$26
		3111C	$26
		3500-Zn E	$76
		3500-Zn F	$76
	C1	Hach 8009	$39
4. Aquatic Toxicity Bioassay of Wastewater			
Description	**Reference**	**Method/s**	**Fee Per Method**
Toxicity, Acute	M1	EPA/600/4-90/027F	$194
	Z13	821-R-02-012	$194
Toxicity, Chronic	N1	EPA/600/4-91/002	$194
	Z3	821-R-02-013	$194
5. Organic Chemicals of Wastewater			
Description	**Reference**	**Method/s**	**Fee Per Method**
Volatile Organics for Pharmaceuticals	D3	524.2 (4.1)	$152
Purgeable Hydrocarbons	E	601	$76
Purgeable Aromatics	E	602	$76
Acrolein and Acrylonitrile	E	603	$76
		624 (Approved for screening only, not for quantification)	$152
		1624B	$152
Phenols	E	604	$116
Phthalate ester	E	606	$116
Nitrosamines	E	607	$116
Organochlorine Pesticides and PCBs	E	608	$152
Nitroaromatics and Isophorone	E	609	$116
PAHs	E	610	$116
Haloethers	E	611	$116
Chlorinated Hydrocarbons	E	612	$116
2, 3, 7, 8-Tetrachlorodibenzo-p-Dioxin	E	613	$457
Carbon-, Hydrogen-, and Oxygen-Containing Pesticides	Z2	616	$116

Purgeables	E	624	$152
Base/Neutrals and Acids (all analytes excluding pesticides)	E	625	$152
Base/Neutrals and Acids (pesticides only)	E	625	$152
Tetra- through Octa-Chlorinated Dioxins and Furans	E	1613B	$258
VOCs by Isotope Dilution GC/MS	E	1624B	$152
Semivolatile Organic Compounds by Isotope Dilution GC/MS	E	1625B	$152
Organophosphorus Pesticides	E	1657	$116
VOCs Specific to the Pharmaceutical Manufacturing Industry by Isotope Dilution GC/MS	K2	1666 (A)	$152
Herbicides	C2	6640B	$116
Ethylene Glycol	K	BLS-188	$152
6. Radiochemistry of Wastewater			
Description	**Reference**	**Method/s**	**Fee Per Method**
Gross Alpha	C2	7110B	$206
	L	900	$206
Gross Beta	C2	7110B	$206
	L	900.0	$206
Radium, Total	C2	7500-Ra B	$206
	L	903.0	$206
Radium 226	C2	7500-Ra C	$206
	L	903.1	$206
SECTION C. SOLID WASTE PARAMETERS			
1. Microbiology of Solid Waste			
Description	**Reference**	**Method/s**	**Fee Per Method**
Coliforms, Total, by Membrane Filter	F	9132	$228
Coliforms, Total, by Multiple Tube Fermentation	F	9131	$228
2. Physical Properties Testing of Solid Waste			
Description	**Reference**	**Method/s**	**Fee Per Method**
Corrosive to Steel	F	1110A	$63
Corrosivity—pH Determination	F	9040C	$63
EP Toxicity	F	1310B	$76
Ignitability (Flashpoint Determination)	F	1010A	$32
		1020B	$32

Paint Filter Liquids Test	F	9095B	$19
TCLP	F	1311	$303
3. Sample Preparation for Metals in Solid Waste			
Description	**Reference**	**Method/s**	**Fee Per Method**
Dissolved in Water	F	3005A	$7
Microwave Assisted Digestions	F	3015A	$7
		3051	$7
		3052	$7
Oils, Greases, and Waxes	F	3040A	$7
		3031	$7
Sediments, Sludges, and Soils	F	3050B	$7
Total Metals	F	3010A	$7
		3020A	$7
Total Recoverable in Water	F	3005A	$7
4. Inorganic Chemistry and Metals of Solid Waste			
Description	**Reference**	**Method/s**	**Fee Per Method**
Aluminum	F	6010B	$10
		6020	$26
	F11	7000B	$26
Ammonia	A	350.3	$39
Antimony	F	6010B	$10
		6020	$26
		7062	$76
	F11	7000B	$26
	F12	7010	$26
Arsenic	F	6010B	$10
		7061A	$76
		7062	$76
		7063	$76
		6020	$26
	F12	7010	$26
Barium	F	6010B	$10
		6020	$26
	F11	7000B	$26
	F12	7010	$26

Beryllium	F	6010B	$10
		6020	$26
	F11	7000B	$26
	F12	7010	$26
Bomb Preparation Method for Solid Waste	F	5050	$7
Boron	F	6010B	$10
Bromide	F	9056	$26
		9211	$39
Cadmium	F	6010B	$10
		6020	$26
	F11	7000B	$26
	F12	7010	$26
Calcium	F	6010B	$10
	F11	7000B	$26
Cation-Exchange Capacity of Soils	F	9080	$34
		9081	$34
Chloride	F	9056	$26
		9057	$76
		9212	$39
		9250	$76
		9251	$76
		9253	$39
Chlorine, Total, in New and Used Petroleum Products	F	9075	$76
		9076	$39
		9077	$39
Chromium, Hexavalent	F	7195	$26
		7196A	$76
		7197	$26
		7198	$40
		7199	$76
Chromium, Total	F	6010B	$10
		6020	$26
	F11	7000B	$26
	F12	7010	$26

Cobalt	F	6010B	$10
		6020	$26
	F11	7000B	$26
	F12	7010	$26
Compatibility Test for Wastes and Membranes Liners	F	9090A	$152
Copper	F	6010B	$10
		6020	$26
	F11	7000B	$26
	F12	7010	$26
Cyanide	F	9010C	$13
		9012B	$76
		9213	$76
		9014	$76
	F9	9015	$76
Cyanide Extraction for Solids and Oils	F10	9013A	$39
Dermal Corrosion	F	1120	$63
EP for Oily Wastes	F	1330A	$76
Flashpoint Determination	F	1030	$32
Fluoride	F	9056	$26
		9214	$39
Iron	F	6010B	$10
	F11	7000B	$26
	F12	7010	$26
Kjeldahl Total, Nitrogen	A	351.4	$76
Lead	F	6010B	$10
		6020	$26
	F11	7000B	$26
	F12	7010	$26
Liquid Release Test Procedure	F	9096	$39
Lithium	F	6010B	$10
	F11	7000B	$26
Magnesium	F	6010B	$10
	F11	7000B	$26

Manganese	F	6010B	$10
		6020	$26
	F11	7000B	$26
	F12	7010	$26
Mercury	F	7470A	$52
		7471A	$52
		7472	$152
Molybdenum	F	6010B	$10
	F11	7000B	$26
	F12	7010	$26
Multiple EP	F	1320	$152
Nickel	F	6010B	$10
		6020	$26
	F11	7000B	$26
	F12	7010	$26
Nitrate	F	9210	$39
		9056	$26
Nitrite	F	9056	$26
Oil and Grease and Petroleum Hydrocarbons	K1	1664A	$76
O-Phosphate-P	F	9056	$26
Osmium	F	6010B	$10
	F11	7000B	$26
Paint Filter Liquids Test	F	9095B	$19
Perchlorate	Z	314.0	$76
pH (Hydrogen Ion)	F	9041A	$39
		9045D	$39
Phosphorus	F	6010B	$10
Phosphorus, Total	A	365.3	$76
Potassium	F	6010B	$10
	F11	7000B	$26
Saturated Hydraulic and Leachate Conductivity and Intrinsic Permeability	F	9100	$152

Selenium	F	6010B	$10
		7741A	$26
		7742	$76
	F12	7010	$26
Silica	F	6010B	$10
Silver	F	6010B	$10
		6020	$26
	F11	7000B	$26
	F12	7010	$26
Sodium	F	6010B	$10
	F11	7000B	$26
Sodium Azide	C2	4110C	$76
Specific Conductance	F	9050A	$39
SPLP	F	1312	$303
Strontium	F	6010B	$10
	F11	7000B	$26
Sulfate	F	9035	$76
		9036	$76
		9038	$76
		9056	$26
Sulfides	F	9030B	$76
		9031	$76
		9215	$76
		9034	$76
Thallium	F	6010B	$10
		6020	$26
	F11	7000B	$26
	F12	7010	$26
Tin	F	6010B	$10
	F11	7000B	$26
Titanium	F	6010B	$10
Vanadium	F	6010B	$10
	F11	7000B	$26
	F12	7010	$26
White Phosphorus by GC	F	7580	$116

Zinc	F	6010B	$10
		6020	$26
	F11	7000B	$26
	F12	7010	$26
5. Organics Procedures in Solid Waste			
Description	**Reference**	**Method/s**	**Fee Per Method**
Separatory Funnel Liquid-Liquid Extraction	F	3510C	$13
Organic Compounds in Water by Microextraction	F5	3511	$13
Continuous Liquid-Liquid Extraction	F	3520C	$13
SPE	F	3535	$13
Soxhlet Extraction	F	3540C	$13
Automated Soxhlet Extraction	F	3541	$13
Pressurized Fluid Extraction	F	3545	$13
Ultrasonic Extraction	F	3550B	$13
Supercritical Fluid Extraction of Total Recoverable Petroleum Hydrocarbons	F	3560	$13
Supercritical Fluid Extraction of PAHs	F	3561	$13
MSE	F4	3570	$13
Waste Dilution	F	3580A	$13
Waste Dilution for Volatile Organics	F	3585	$13
Alumina Cleanup	F	3610B	$13
Alumina Column Cleanup and Separation of Petroleum Wastes	F	3611B	$13
Florisil Cleanup	F	3620B	$13
Silica Gel Cleanup	F	3630C	$13
Gel-Permeation Cleanup	F	3640A	$13
Acid-Base Partition Cleanup	F	3650B	$13
Sulfur Cleanup	F	3660B	$13
Sulfuric Acid/Permanganate Cleanup	F	3665A	$13
Screening for Pentachlorophenol by Immunoassay	F	4010A	$76
Screening for 2,4-Dichlorophenoxyacetic Acid by Immunoassay	F	4015	$76
Screening for PCBs by Immunoassay	F	4020	$76
Screening for PCDDs and PCDFs by Immunoassay	F3	4025	$76

Soil Screening for Petroleum Hydrocarbons by Immunoassay	F	4030	$76
Soil Screening for PAHs by Immunoassay	F	4035	$76
Soil Screening for Toxaphene by Immunoassay	F	4040	$76
Soil Screening for Chlordane by Immunoassay	F	4041	$76
Soil Screening for DDT by Immunoassay	F	4042	$76
TNT Explosives in Soil by Immunoassay	F	4050	$76
RDX in Soil by Immunoassay	F	4051	$76
VOCs in Various Sample Matrices Using Equilibrium Headspace Analysis	F8	5021A	$13
Purge-and-Trap for Aqueous Samples	F6	5030C	$13
Volatile, Nonpurgeable, Water-Soluble Compounds by Azeotropic Distillation	F	5031	$13
VOCs by Vacuum Distillation	F	5032	$13
Closed-System Purge-and-Trap and Extraction for Volatile Organics in Soil and Waste Samples	F2	5035A	$13
Analysis for Desorption of Sorbent Cartridges from VOST	F	5041A	$13
EDB and DBCP by Microextraction and GC	F	8011	$116
$C_{10} - C_{32}$ Hydrocarbons	K	8015AZ 1	$116
Nonhalogenated Organics Using GC/FID	F7	8015D	$116
Aromatic and Halogenated Volatiles by GC Using Photoionization and/or Electrolytic Conductivity Detectors	F	8021B	$152
Acrylonitrile by GC	F	8031	$76
Acrylamide by GC	F	8032A	$76
Acetonitrile by GC with Nitrogen-Phosphorus Detection	F	8033	$76
Phenols by GC	F	8041	$116
Phthalate Esters by GC/ECD	F	8061A	$116
Nitrosamines by GC	F	8070A	$116
Organochlorine Pesticides by GC	F	8081A	$152
PCBs by GC	F	8082	$152
Nitroaromatics and Cyclic Ketones by GC	F	8091	$116
PAHs	F	8100	$116
Haloethers by GC	F	8111	$116

Chlorinated Hydrocarbons by GC: Capillary Column Technique	F	8121	$116
Aniline and Selected Derivatives by GC	F	8131	$116
Organophosphorus Compounds by GC	F	8141A	$152
Chlorinated Herbicides by GC Using Methylation or Pentafluorobenzylation Derivatization	F	8151A	$152
VOCs by GC/MS	F	8260B	$152
Semivolatile Organic Compounds by GC/MS	F	8270C	$152
Semivolatile Organic Compounds (PAHs and PCBs) in Soils/Sludges and Solid Wastes Using TE/GC/MS	F	8275A	$152
8280A: Polychlorinated Dibenzo-*p*-Dioxins and PCDFs by HRGC/LRMS	F	8280A	$258
PCDDs and PCDFs by HRGC/HRMS	F	8290	$258
PAHs	F	8310	$116
Determination of Carbonyl Compounds by HPLC	F	8315A	$116
Acrylamide, Acrylonitrile, and Acrolein by HPLC	F	8316	$116
N-Methylcarbamates by HPLC	F	8318	$116
Solvent-Extractable Nonvolatile Compounds by HPLC/TS/MS or UV Detection	F	8321A	$152
Solvent Extractable Nonvolatile Compounds by HPLC/PB/MS	F	8325	$152
Nitroaromatics and Nitramines by HPLC	F	8330	$116
Tetrazene by Reverse Phase HPLC	F	8331	$116
Nitroglycerine by HPLC	F	8332	$116
GC/FT-IR Spectrometry for Semivolatile Organics: Capillary Column	F	8410	$116
Analysis of Bis (2-chloroethyl) Ether and Hydrolysis Products by Direct Aqueous Injection GC/FT-IR	F	8430	$116
Total Recoverable Petroleum Hydrocarbons by Infrared Spectrophotometry	F	8440	$116
Colorimetric Screening Method for TNT in Soil	F	8515	$76
TOX	F	9020B	$76
POX	F	9021	$76
TOX by Neutron Activation Analysis	F	9022	$114

EOX in Solids	F	9023	$114
TOCs	F	9060A	$76
Phenolics	F	9065	$152
		9066	$152
		9067	$152
HEM for Aqueous Samples	F	9070A	$76
HEM for Sludge, Sediment, and Solid Samples	F	9071B	$76
PCBs in Waste Oil	F1	600/4-81-045	$152
6. Bulk Asbestos Analysis of Solid Waste			
Description	**Reference**	**Method/s**	**Fee Per Method**
Bulk Asbestos Analysis	G	9002	$228
	H	Bulk Asbestos	$228
Fiber Counting	G	7400	$228
		7402	$228
7. Radiochemistry of Solid Waste			
Description	**Reference**	**Method/s**	**Fee Per Method**
Alpha-Emitting Radium Isotopes	F	9315	$206
Gross Alpha and Beta	F	9310	$206
Radium-228	F	9320	$206
SECTION D. AIR AND STACK PARAMETERS			
1. Ambient Air Primary and Secondary Pollutants			
Description	**Reference**	**Method/s**	**Fee Per Method**
Carbon Monoxide	O	Appendix C	$393
Formaldehyde	F	8520	$393
Hydrocarbons	O	Appendix E	$393
Lead	O	Appendix G	$393
Nitrogen Dioxide	O	Appendix F	$393
Ozone	O	Appendix D	$393
		Appendix H	$393
Particulate Matter	O	Appendix B	$393
		Appendix J	$393
		Appendix K	$393
Sulfur Oxides	O	Appendix A	$393

2. Stationary and Stack Sources			
Description	**Reference**	**Method/s**	**Fee Per Method**
Carbon Dioxide, Oxygen, and Excess Air	Q	Method 3	$393
Carbon Monoxide	Q	Method 10	$393
		Method 10A	$393
		Method 10B	$393
Carbonyl Sulfide, Hydrogen Sulfide, and Carbon Disulfide	Q	Method 15	$393
Fluoride	Q	Method 13A	$393
		Method 13B	$393
		Method 14	$393
Fugitive Emissions	Q	Method 22	$393
Gaseous Organic Compounds	Q	Method 18	$393
		Method 25	$393
		Method 25A	$393
		Method 25B	$393
Hydrogen Sulfide	Q	Method 11	$393
Inorganic Lead	Q	Method 12	$393
Moisture Content	Q	Method 4	$393
Nitrogen Oxide	Q	Method 7	$393
		Method 7A	$393
		Method 7B	$393
		Method 7C	$393
		Method 7D	$393
		Method 7E	$393
		Method 19	$393
		Method 20	$393
Particulate Emissions by Asphalt Processing	Q	Method 5A	$152
Particulate Emissions by Fiberglass Insulation	Q	Method 5E	$152
Particulate Emissions by Nonsulfate	Q	Method 5F	$152
Particulate Emissions by Nonsulfuric Acid	Q	Method 5B	$152
Particulate Emissions by Pressure Filters	Q	Method 5D	$152
Particulate Emissions by Stationary Sources	Q	Method 5	$152
		Method 17	$152

Particulate Emissions by Sulfur Dioxide	Q	Method 19	$152
Particulate Emissions by Wood Heaters	Q	Method 5G	$152
		Method 5H	$152
Petroleum Products, Heat of Combustion	I	D240-92	$76
		D240-87	$76
Petroleum Products, Hydrometer Method	I	D287-92	$76
Petroleum Products, Sulfur	I	D4294-90	$152
Sulfur and Total Reduced Sulfur	Q	Method 15A	$393
		Method 16	$393
		Method 16A	$393
		Method 16B	$393
Sulfur Dioxide	Q	Method 6	$393
		Method 6A	$393
		Method 6B	$393
		Method 6C	$393
		Method 8	$393
		Method19	$393
		Method 20	$393
Sulfuric Acid Mist	Q	Method 8	$393
Vapor Tightness, Gasoline Delivery Tank	Q	Method 27	$393
Volatile Matter Density, Solids and Water	Q	Method 24	$393
		Method 24A	$393
VOCs	Q	Method 21	$393
	S1	TO-15	$152
Wood Heaters, Certification and Burn Rates	Q	Method 28	$393
		Method 28A	$393
3. ADEQ Emission Test			
Description	**Reference**	**Method/s**	**Fee Per Method**
Particulate Emissions, Dry Matter	R	Method A2	$393
Particulate Emissions, Sulfuric Acid Mist/ Sulfur Oxides	R	Method A1	$393

4. National Emission Standards for Hazardous Air Pollutants			
Description	**Reference**	**Method/s**	**Fee Per Method**
Arsenic	S	Method 108	$393
		Method 108A	$393
		Method 108B	$393
		Method 108C	$393
Beryllium	S	Method 103	$393
		Method 104	$393
Mercury	S	Method 101	$393
		Method 101A	$393
		Method 102	$393
		Method 105	$393
Polonium 210	S	Method 111	$393
Vinyl Chloride	S	Method 106	$393
		Method 107	$393
		Method 107A	$393
SECTION E. METHODS DIRECTOR APPROVED UNDER R9-14-610(C)			
Description	**Reference**	**Method/s**	**Fee Per Method**
Chromatographic Method	-	Any	$116
Mass Spectrometric Method	-	Any	$152
Toxicity Method	-	Any	$194
Other Method	-	Any	$75

Table 2. Instrumentation Fees

Description	**Subtype, if any**	**Fee Per Instrument**
Atomic Absorption	Cold Vapor	$76
	Flame Burner	$76
	Graphite Furnace	$76
	Hydride Generator	$76
	Other	$76
Counters for Radioactivity	-	$76

Gas Chromatograph	Electron Capture	$76
	Flame Ionization	$76
	Flame Photometric	$76
	Halide Specific	$76
	Nitrogen/Phosphorus	$76
	Photoionization	$76
	Other	$76
Gas Chromatograph/Mass Spectrometer	High Resolution	$194
	Other than High Resolution	$152
High Pressure Liquid Chromatograph	Ultraviolet	$76
	Fluorescence	$76
	Other	$76
High Pressure Liquid Chromatograph/Mass Spectrometer	-	$152
Inductively Coupled Plasma	-	$76
Inductively Coupled Plasma/Mass Spectrometer	-	$152
Ion Chromatograph	-	$76
Automated Autoanalyzer	-	$76
Mercury Analyzer	-	$76
Organic Halide, Total	-	$76
Transmission Electron Microscope	-	$396
X-Ray Diffraction Unit	-	$76

EXHIBIT II. ALTERNATE DEFAULT LIMITS

Table 1. Default Limits

QUALITY CONTROL PARAMETERS WITHOUT ACCEPTANCE CRITERIA SPECIFIED IN THE METHOD	DEFAULT LIMITS
Matrix Spike/LFM (processed or non-processed)	LCS/LFB
LCS/LFB (processed or non-processed)/Second source reference standard	CCV/continuing IPC
LOQ/MRL (non-processed)	CCV/continuing IPC or ± 50%
LOQ/MRL (processed)	LCS/LFB or ± 50%
QCS (non-processed)	ICV/continuing IPC/manufacturer's limits
QCS (processed)	LCS/LFB/manufacturer's limits
IDOC limits	LFB/LCS

LFB/LCS/LFM/duplicate RPD	IDOC limits/≤20%
Non-CCC compounds	CCC limits
ICV/CCV	± 10%

A. For 8000 methods that do not specify the QC limits for Matrix Spike/LCS, a licensee may use the default limit of ±30%.
B. For 500, 600, 1600, and 8000 series methods that do not specify surrogates or acceptance limits for surrogates, a licensee may use the default limits of 70-130%.
C. For 500, 600, 1600, and 8000 series methods that do not specify internal standards or acceptance limits for internal standards, a licensee may use the default limits of 70-130%.
D. For methods that do not list a precision measurement, a licensee may use 20% RPD.
E. For methods that do not specify the LOQ/MRL, a licensee may use the default limit of ± 50%.

NOTICE OF PROPOSED RULEMAKING

TITLE 9. HEALTH SERVICES

CHAPTER 14. DEPARTMENT OF HEALTH SERVICES LABORATORIES

[R06-331]

PREAMBLE

1. Sections Affected — **Rulemaking Action**

R9-14-701	Repeal
R9-14-701	New Section

2. The statutory authority for the rulemaking, including both the authorizing statute (general) and the statutes the rules are implementing (specific):

Authorizing statute: A.R.S. § 36-136(A)(7) and (F)

Implementing statutes: A.R.S. § 36-405.01

3. A list of all previous notices appearing in the *Register* addressing the proposed rule:

Notice of Rulemaking Docket Opening: 12 A.A.R. 2157, June 16, 2006

4. The name and address of agency personnel with whom persons may communicate regarding the rulemaking:

Name: Steve Baker, Office Chief

Address: Arizona Department of Health Services
Bureau of State Laboratory Services
250 N. 17th Ave.
Phoenix, AZ 85007

Telephone: (602) 364-0735

Fax: (602) 364-0759

E-mail: bakersd@azdhs.gov

or

Name: Kathleen Phillips, Rules Administrator

Address: Arizona Department of Health Services
Office of Administrative Rules
1740 W. Adams, Suite 202
Phoenix, AZ 85007

Telephone: (602) 542-1264

Fax: (602) 364-1150

E-mail: phillik@azdhs.gov

5. An explanation of the rule, including the agency's reasons for initiating the rule:

A.R.S. § 36-405.01, which was passed by the Legislature in 1977, specifies the manner in which health screening services are required to be conducted and authorizes the Arizona Department of Health Services (Department) to "adopt such ... regulations necessary or appropriate to carry out the purposes of this section." "Health screening services" is defined in A.R.S. § 36-401(A)(23) as "the acquisition, analysis and delivery of health-related data of individuals to aid in the determination of the need for medical services." Health screening services may include vision screening, hearing screening, blood pressure screening, and health screening laboratory services. Health screening laboratory services are those health screening services that determine the need for medical services through laboratory analysis of materials derived from the human body. The Department implemented A.R.S. § 36-405.01 for health screening laboratory services in 9 A.A.C.14, Article 7, which included definitions and requirements for health screening laboratory services.

In preparing the 2006 Five-Year-Review Report for 9 A.A.C. 14, Article 7, the Department determined that the requirements in Article 7 for health screening laboratory services were duplicative of requirements for certification by the United States Department of Health and Human Services, including those requirements contained in the Clinical Laboratory Improvement Amendments (CLIA) of 1988, 42 CFR 493, Laboratory Requirements, which are applicable to almost all facilities performing health screening laboratory services in Arizona. The Department decided to allow all Sections of Article 7 except R9-14-701 to expire and to revise R9-14-701 to include appropriate definitions and all requirements for health screening laboratory services. As stated in the 2006 Five-Year-Review Report for R9-14-701, approved by the Governor's Regulatory Review Council (Council) on August 1, 2006, the Department is initiating rulemaking to delete unnecessary definitions, clarify requirements, and make the rule conform to current rulemaking format and style requirements of the Council and the Office of the Secretary of State. The new R9-14-701 contains definitions and requirements for persons conducting health screening laboratory services and specifies situations in which the rule does not apply.

6. A reference to any study relevant to the rule that the agency reviewed and either proposes to rely on or not rely on in its evaluation of or justification for the rule, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:

The Department did not review or rely on any study related to this rulemaking package.

7. A showing of good cause why the rule is necessary to promote a statewide interest if the rule will diminish a previous grant of authority of a political subdivision of this state:

Not applicable

8. The preliminary summary of the economic, small business, and consumer impact:

As used in this summary, annual costs/revenues are designated as minimal when less than $1,000, moderate when between $1,000 and $10,000, and substantial when greater than $10,000.

- The annual costs to the Department resulting from this rulemaking are expected to be minimal, and the Department expects little or no additional revenue due to the rulemaking.
- The Department anticipates that this rulemaking may reduce the burden on persons conducting health screening laboratory services by a minimal degree by clarifying requirements and aligning health screening laboratory services requirements with the CLIA requirements with which almost all of these persons already need to comply. A person providing health screening laboratory services that learns of CLIA requirements as a result of this rulemaking may bear a minimal to moderate cost associated with complying with CLIA requirements.
- Entities that pay for health screening laboratory services or medical services for individuals may receive minimal benefit from better medical services being provided to individuals as a result of more accurate test results, but may bear minimal costs associated with compliance with CLIA requirements passed on by persons who were unaware of CLIA requirements before the rulemaking.
- Individuals receiving health screening laboratory services from persons learning of CLIA requirements as a result of this rulemaking may receive minimal benefit from more accurate test results for health screening laboratory services associated with the persons complying with CLIA requirements, but bear minimal increased costs associated with compliance, passed on by the persons providing the health screening laboratory services.
- Society in general may benefit to a minimal to moderate degree from more healthy and productive individuals whose health screening laboratory tests were performed by persons complying with CLIA requirements.

The Department has determined that the benefits related to public health outweigh any potential costs associated with this rulemaking.

9. The name and address of agency personnel with whom persons may communicate regarding the accuracy of the economic, small business, and consumer impact statement:

Name: Steve Baker, Office Chief

Address:	Arizona Department of Health Services Bureau of State Laboratory Services 250 N. 17th Ave. Phoenix, AZ 85007
Telephone:	(602) 364-0735
Fax:	(602) 364-0759
E-mail:	bakersd@azdhs.gov
	or
Name:	Kathleen Phillips, Rules Administrator
Address:	Arizona Department of Health Services Office of Administrative Rules 1740 W. Adams, Suite 202 Phoenix, AZ 85007
Telephone:	(602) 542-1264
Fax:	(602) 364-1150
E-mail:	phillik@azdhs.gov

10. The time, place, and nature of the proceedings for the making, amendment, or repeal of the rule, or if no proceeding is scheduled, where, when, and how persons may request an oral proceeding on the proposed rule:

The Department has scheduled the following oral proceeding:

Date:	October 16, 2006
Time:	1:00 p.m.
Location:	Arizona State Laboratory 250 N. 17th Ave., 1st Floor Conference Room Phoenix, AZ 85007
Close of record:	4:00 p.m on October 16, 2006

A person may submit written comments on the proposed rules no later than the close of record to either of the individuals listed in items #4 and #9.

A person with a disability may request a reasonable accommodation, such as a sign language interpreter, by contacting Ruthann Smejkal at (602) 364-3959 or smejkar@azdhs.gov. Requests should be made as early as possible to allow time to arrange the accommodation.

11. Any other matters prescribed by statute that are applicable to the specific agency or to any specific rule or class of rules:

Not applicable

12. Incorporations by reference and their location in the rules:

Not applicable

13. The full text of the rules follows:

TITLE 9. HEALTH SERVICES

CHAPTER 14. DEPARTMENT OF HEALTH SERVICES LABORATORIES

ARTICLE 7. HEALTH SCREENING SERVICES

Section

R9-14-701. ~~Definitions~~ Health Screening Laboratory Services

ARTICLE 7. HEALTH SCREENING SERVICES

R9-14-701. ~~Definitions~~ Health Screening Laboratory Services

~~In this Article, unless the context otherwise requires:~~

~~1. "Health care provider" means an attending physician or individual licensed and recognized as primarily responsible for diagnosis and treatment or initiating diagnosis, testing, or therapy of a patient pursuant to A.R.S. Title 32, Chapters 7, 8, 13, 14, 17, 25, or 29; or any person licensed or certified as a nurse practitioner pursuant to A.R.S. Title 32, Chapter 15 and A.A.C. R4-19-503.~~

~~2. "Image receptor" means any device, including fluorescent screen or radiographic film, which transforms incident ionizing radiation either into a visible image or into another form which can be made into a visible image by further transformation.~~

~~3. "Ionizing radiation" means gamma rays and X-rays, alpha and beta particles, high speed electrons, neutrons, protons, and other nuclear particles or rays.~~

~~4. "Phantom" means, in radiology, a device that simulates the conditions encountered when radiation or radioactive materials are deposited in vivo and which permits a quantitative estimation of its effect.~~

~~5. "Screening administrator" means the principal business officer responsible for the health screening entity.~~

~~6. "Screening entity" means the organization providing the health screening procedure.~~

~~7. "Screening test" means a procedure which is used for detecting diseases and conditions to aid the determination of the need for medical services.~~

~~8. "Test site" means any facility or site, public or private, which analyzes the human body or materials derived from the human body for the purposes of health care, treatment, or screening.~~

~~9. "Test-site supervisor" means a person, designated in writing by the director of the screening entity, who is responsible for the health screenings service at the test site.~~

A. Definitions. In this Article, unless otherwise specified:

1. "Activities of daily living" means the tasks that support everyday life, such as toileting, bathing, dressing, eating, mobility, and getting in or out of bed.
2. "Assist" means to give help, support, or aid to an individual in performing a task.
3. "Caregiver" means an individual, such as a home health aide, who receives monetary compensation for assisting another individual with activities of daily living.
4. "Certified laboratory" means the same as in A.R.S. § 36-451.
5. "Drug of abuse" means a chemical substance, such as a narcotic or hallucinogen, that is used by an individual for non-medicinal reasons.
6. "Family member" means an individual related to another individual by birth, marriage, or adoption.
7. "Forensic" means relating to the use of science or technology in the investigation and establishment of facts or evidence appropriate for a court of law.
8. "Guardian" means an individual appointed by a court under A.R.S. Title 14, Chapter 5, Article 2.
9. "Health screening laboratory services" means health screening services that determine the need for medical services, as defined in A.R.S. § 36-401, through the performance of laboratory analyses on materials derived from the human body.
10. "Health screening services" means the same as in A.R.S. § 36-401.
11. "Home health aide" means an individual who works for monetary compensation from a home health agency, as defined in A.R.S. § 36-151, or a hospice service agency, as defined in A.R.S. § 36-401, to provide assistance to another individual who is not physically or mentally able to perform activities of daily living.
12. "In vitro diagnostic device" means a piece of equipment or tool:
    a. Approved by the U.S. Food and Drug Administration and specified in a list available at http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfIVD/Search.cfm,
    b. Used for the measurement of specific chemicals in materials derived from the human body, and
    c. Sold without a prescription.
13. "Laboratory analysis" means a test performed by a laboratory on body fluid, tissue, or excretion for the purpose of determining the presence, absence, or concentration of various substances in the body.
14. "Research" means a systematic investigation to establish facts that may contribute to knowledge from which an individual may draw inferences or a general conclusion.

B. Requirements. Except as specified in subsection (C), a person performing health screening laboratory services shall be a certified laboratory.

C. Exceptions. This Section does not apply when:

1. A test is performed by an individual or a family member, guardian, or friend of the individual:
    a. Using an in vitro diagnostic device; and
    b. On materials derived from the individual's body;
2. An individual's caregiver assists the individual to perform a test:

a. Using an in vitro diagnostic device; and
b. On materials derived from the individual's body;
3. A laboratory analysis is performed solely for forensic or research purposes;
4. A laboratory analysis is performed solely for urine testing for drugs of abuse for employment purposes; or
5. A laboratory analysis is performed under the jurisdiction of the Department of Veteran's Affairs or a component of the Department of Defense.